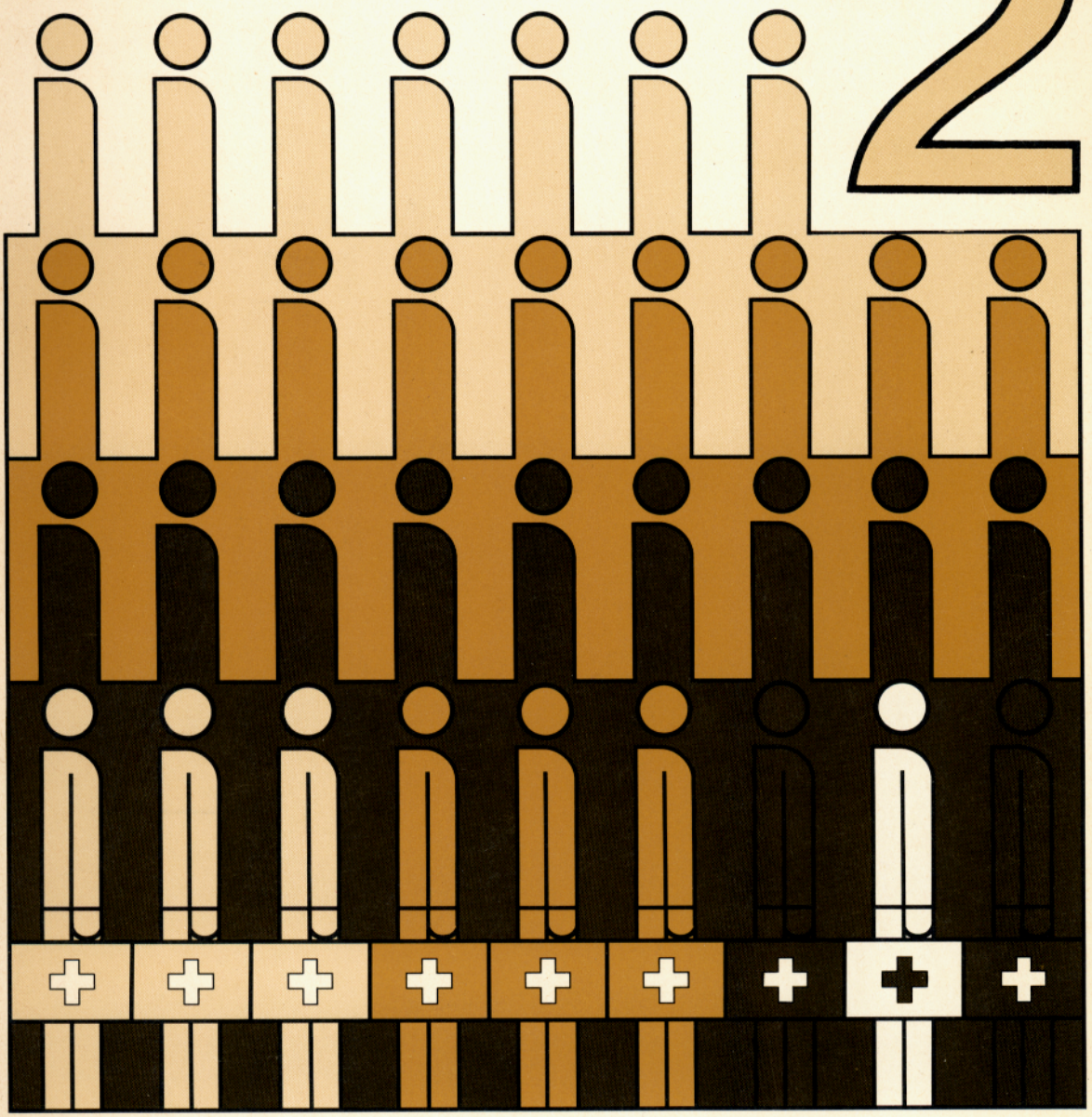
IDRC-069e

LOW-COST RURAL HEALTH CARE AND HEALTH MANPOWER TRAINING

an annotated bibliography with special emphasis on developing countries

FRANCES M. DELANEY

VOLUME 2



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Low-Cost Rural Health Care and Health Manpower Training

An annotated bibliography with special emphasis on developing countries

Volume 2

Frances M. Delaney

(This is the second volume in a series of annotated bibliographies on low-cost rural health care and health manpower training. These volumes will be published irregularly.)

Health auxiliary, Teknaf, Bangladesh

Abstract This bibliography is an attempt to coordinate information on nontraditional health care delivery systems in remote regions of the world, especially in developing countries. The literature abstracted focuses primarily on new models of health care delivery, and on the training and utilization of auxiliary health workers. It is intended to be of use to: (*a*) persons who are involved in planning, operating, and evaluating systems to provide rural health services; (*b*) persons concerned with the training of auxiliary health workers to staff such systems; and (*c*) organizations that are supporting research into the problems of organizing and staffing health care delivery systems. This is the second volume in a series on rural health care delivery systems.

Résumé Cette bibliographie tente de coordonner une information sur les différentes méthodes de distribuer des soins aux populations rurales à travers le monde, et surtout dans les pays en voie de développement. La documentation existante a trait surtout à la formation du personnel auxiliare de santé. C'est notre intention de la mettre à la portée des animateurs de programmes visant à fournir des soins médicaux, du personnel enseignant, et des organisations qui offrent un appui financier pour des recherches dans ce domaine. Ce volume est le deuxième d'une série de bibliographies sur les services de santé en milieu rural.

Resumene Esta bibliografía representa un esfuerzo por coordinar la información existente sobre nuevos tipos de sistemas de prestación de servicios de salud que están siendo experimentados en varias regiones remotas o aisladas del mundo y en particular en aquéllas de los países en vías de desarrollo. La literatura aquí resumida abarca principalemente los nuevos modelos de prestación de servicios de salud, así como los aspectos de capacitación y utilización de personal auxiliar de salud. Esta bibliografía constituye un instrumento de trabajo especialmente útil para: (*a*) las personas que participan en las etapas de planificación, implantación y evaluación de servicios salud para las zonas rurales; (*b*) las personas dedicadas a la capacitación del personal auxiliar destinado a trabajar en los servicios mencionados; (*c*) las organizaciones que están apoyando y promoviendo la búsqueda de soluciones a los problemas de organización y de dotación de personal de los sistemas de prestación de servicios de salud. Este es el segundo volumen de una serie sobre sistemas de prestación de servicios de salud en medios rurales.

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Mrs Karrary, village health worker, with patient in Baghan Village, Kavar, Iran

Preface

Many of those trying to provide medical services to the world's poor have now recognized that Western practices will probably never be able to cope. Health care delivery systems based on hospitals and highly specialized doctors may provide for some favoured city dwellers but are often completely beyond the reach of rural populations. New ways of delivering adequate health care are thus being urgently sought, and concerned governmental and private agencies are focusing attention on all attempts to improve the accessibility and quality of health care.

Much information about such attempts is generated in the industrialized nations. Information generated in the Third World is more apt to be accumulated in developed countries than in the countries that need it most.

These circumstances are changing. International, national, and private agencies have begun to apply information science techniques to ensure that information about food shortages, water and sanitation problems, and health care is made available to policymakers, planners, and practitioners in developing countries. Evidence of this in the health field is shown by the increasing effort to publicize health care projects being conducted throughout the world. One of these efforts, the "Register of Health Services Development Projects" issued by the Division of Strengthening of Health Services, World Health Organization, Geneva, provides selected information "on research and development programmes on the organization of community health services."

Another has been the establishment by IDRC of a computerized data base, which brings information on the delivery of health care to rural areas under bibliographic control. Two annotated bibliographies have been published from this data base. The first[1] dealt specifically with the People's Republic of China. The second[2] emphasized nontraditional systems of health care delivery and the training and utilization of auxiliaries. The latter was the first of a series designed as a reference source for health representatives of governmental and voluntary agencies, physicians, dentists, public health workers, health educators, and the many other individuals concerned with the problems of health care delivery in rural areas of the world. The present publication is the second of the series.

The subject scope of Volume 2, as of Volume 1, includes:

1) the planning, financing, organization, utilization, and evaluation of systems designed to provide health care to people who lack access to conventional hospital and physician services;

2) the impact of health care services on social and economic indices, including demographic indices such as mortality, morbidity, nutrition, and epidemiology;

3) the relationships between health care systems and other community organizations and services, such as schools and agricultural extension programmes, and community participation in health care systems; and

4) staffing of health care systems: the function of different personnel, particularly paramedical personnel, their training (curricula), distribution, and utilization.

Entries in this bibliography do not cover a specific time period because they were processed as they were received at IDRC. Citations include books, journal articles, reports, studies, and surveys. Unpublished documents that conform to the subject scope have also been included.

In an attempt to maintain continuity with Volume 1, entries have again been grouped under five major subject headings (31 sections and subsections). Within each section, bibliographic entries have been listed alphabetically by senior author, editor, or compiler and, within this, by date order, with the most recent appearing first. Anonymous articles appear under the corporate bodies who have sponsored them. An English

[1]Akhtar, S., *Health Care in the People's Republic of China: A Bibliography with Abstracts.* Ottawa, International Development Research Centre (IDRC-038e), 1975. 182p.

[2]Akhtar, S., *Low-Cost Rural Health Care and Health Manpower Training: An Annotated Bibliography with Special Emphasis on Developing Countries. Volume 1.* Ottawa, International Development Research Centre (IDRC-042e), 1975. 164p.

translation of titles is provided for all foreign entries and, because the bibliography is computer-generated, diacritical marks have been omitted.

"*See also*" references have again been included at the beginning of each section to guide readers to related references in other sections. Individual entries that correlate, for some reason, with other entries have also been cross-referenced.

The geographical and subject indexes have been slightly modified to make them easier to use. Geographic entries are more specific; articles have been cited under specific countries where possible and under geographical regions only when they refer to the region as a whole. The subject index has been expanded slightly and makes greater use of "*see also*" references. General terms within the subject index now include "*see also*" references to more specific terms as well as related terms. The end result is a reference "tree."

As in Volume 1, order coupons have been provided at the back of the bibliography for individuals in developing countries who cannot obtain some of the fugitive literature through local bookshops and libraries. Coupons should be sent to: Rural Health Care Bibliography, c/o Library, IDRC, Box 8500, Ottawa, Canada K1G 3H9.

In the Preface to Volume 1, recipients of the bibliography were invited to comment on the usefulness of the bibliographies. The response to this request has been encouraging but small; therefore, I would again like to invite your observations, criticisms, and comments. Only through the comments of users can we evaluate the bibliography and provide strong justification for the production of future volumes.

I would also like to take this opportunity to apologize, on behalf of IDRC, to Abby Stevens and Peter K. Nonkoh who both worked on the material in Volume 1 of this series of bibliographies and whose names were inadvertently omitted from the acknowledgments and credits made in the publication.

The support of those individuals and institutions who continue to send us comments and material for inclusion in the data base is greatly appreciated. In addition, the contribution of the IDRC computer team, the IDRC Library staff, the Multilingual Services Division of the Secretary of State Department, Ottawa, and Manuel Brandres is gratefully acknowledged.

Hope Cadieux, **Amy J. Chouinard**, and **M. Paul McConnell** wrote the abstracts, assigned keywords, and assisted in editorial work. To them, and to Anita Firth who supported the activities in ways too numerous to mention, go my special thanks for their cooperation and dedication to this project. It has been a pleasure working with them.

Frances M. Delaney
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Abbreviations and Acronyms used in this series

ABU – Ahmadu Bello University, Zaria, Nigeria

ALERT – All African Leprosy and Rehabilitation Training Centre, Addis Ababa

APHA – American Public Health Association, Washington, D.C.

BCG – Bacillus Calmette-Guerin vaccine

CAHP – Coordinating Agency for Health Planning, New Delhi

CENTO – Central Treaty Organization, Ankara

CFNI – Caribbean Food and Nutrition Institute, Kingston, Jamaica

CIDA – Canadian International Development Agency, Ottawa

CIIR – Catholic Institute for International Relations, London

CMAI – Christian Medical Association of India, Bangalore

CMC – Christian Medical Commission, Geneva

CPC – Carolina Population Center, Chapel Hill, N.C.

CSG – Capital Systems Group, Inc., Bethesda, Md.

CUSO – Canadian University Service Overseas, Ottawa

DANIDA – Danish International Development Agency, Copenhagen

DHEW – United States Department of Health, Education, and Welfare, Washington, D.C.

Engl. – English

FAO – Food and Agriculture Organization, Rome

FP – Family Planning

Fren. – French

GPHCTC – Gondar Public Health College and Training Centre, Ethiopia

HSMHA – Health Services and Mental Health Administration, Washington, D.C.

IBRD – International Bank for Reconstruction and Development, Washington, D.C.

ICA – Colombian Agricultural Institute, Bogota

IDR – Institute of Development Research, Copenhagen

IDRC – International Development Research Centre, Ottawa

ILO – International Labour Organization, Geneva

IPPF – International Planned Parenthood Federation, London

IRHFP – Institute of Rural Health and Family Planning, Gandhigram, India

ITDG – Intermediate Technology Development Group, London

IUCD – Intrauterine Contraceptive Device

IUD – Intrauterine Device

KAP – Knowledge, Attitude, and Practice (Study)

KNIPOROS – Kenya-Netherlands-Israel Project for Operational Research in Outpatient Services, Kenya

LRCS – League of Red Cross Societies, Geneva

MCH – Maternal and Child Health

MEDLARS – Medical Literature Analysis and Retrieval Systems

MESH – Medical Subject Headings

NEAC – Nutrition Education Action Committee, Kingston, Jamaica

NTIS – National Technical Information Service, Washington, D.C.

OAS – Organization of American States, Washington, D.C.

OECD – Organization for Economic Cooperation and Development, Paris

PAHO – Pan American Health Organization, Washington, D.C.

Russ. – Russian

SIDA – Swedish International Development Authority, Stockholm

Span. – Spanish

UCLA – University of California, Los Angeles

UN – United Nations, New York

UNDP – United Nations Development Program, New York

UNESCO – United Nations Educational, Scientific and Cultural Organization, Paris

UNESOB – United Nations Economic and Social Office in Beirut, Beirut

UNFPA – United Nations Fund for Population Activities, New York

UNICEF – United Nations Children's Fund, New York

UNROD – United Nations Relief Operations in Dacca

USAID – United States Agency for International Development, Washington, D.C.

USGPO – United States Government Printing Office, Washington, D.C.

WHO – World Health Organization, Geneva

Village health volunteers training group, Khon Kaen, Thailand

I. Reference Works

0701 Akhtar, S. International Development Research Centre, Ottawa. *Health care in the People's Republic of China: a bibliography with abstracts.* Ottawa, International Development Research Centre, 1975. 182p. IDRC/038e.Engl.

This bibliography contains 560 abstracts of published and unpublished documents concerned with health services and history of medicine in the People's Republic of China. It includes material on: (1) planning, financing, organization, utilization, and evaluation of systems that are designed to provide health care to people lacking access to conventional hospital and physician services; (2) the social and economic impact of health care services; (3) the relationships between health care systems and other community organizations and services; and (4) the training, utilization, and distribution of different health personnel. In addition to a section containing reference works, there are chapters devoted to the history of Chinese medicine, disease control, medical education and training, health care organization and planning, family planning/MCH, dental health, and nutrition. Detailed subject and author indices and a list of selected names and addresses of authors and institutions who are interested in this field are provided.

0702 Beyrer, M.K., Nolte, A.E., Solleder, M.K. *Directory of selected references and resources for health instruction.* Minneapolis, Minn., Burgess Publishing, 1969. 210p. Engl.

This directory was compiled for use by all levels of health personnel – instructor, school nurse, librarian, researcher, and health curriculum planner. It is divided into three sections: references for curriculum development (textbooks, instruction guides, evaluation instruments, and other teaching materials); resources for health instruction (names and addresses of agencies, organizations, journals, and periodicals); and indexes of articles pertinent to health and health instruction contained in the *Journal of School Health, Journal of Health, Physical Education, and Recreation*, and *Today's Health.*

0703 Blake, R.R., ed(s). Carolina Population Center, University of North Carolina, Chapel Hill. *Family planning educational materials: an annotated bibliography of selected items.* Chapel Hill, N.C., Carolina Population Center, Sep 1969. 148p. Engl.

In this annotated bibliography, family planning educational materials are listed in two sections: Section I lists items normally distributed to the general public, and Section II deals with publications and training aids that would be suitable for training various categories of clinic and field personnel. In the first section, items are divided into those designed to motivate or persuade and those designed to provide information about the methods. An additional subsection lists materials designed for use in courses on sex and family life. Within these subsections, materials are listed by media: booklets-brochures, films, fliers-folders, posters, etc. In the Methods of Family Planning section, materials are subdivided into: methods-general, intrauterine devices, oral contraceptives, sterilization, and nonmedical methods. The appendix is an alphabetized address list of agencies that produce and/or distribute the materials listed in this bibliography.

0704 Corey, K.E., Stafford, H.A. *Planning for locational change in the delivery of medical care: a selected bibliography.* Monticello, Ill., Council of Planning Librarians, Exchange Bibliography 100, Oct 1969. 11p. Engl.

Since this bibliography on systematic methods for planning the location of health facilities was compiled for a workshop, no attempt was made to generate an exhaustive listing. The 122 references are listed alphabetically by author in two sections. The first section, Locational Analysis and Planning of Health Facilities and Services, deals with topics such as "Evaluating the distribution of hospitals" and "The concept of distance as a factor in accessibility and utilization of health care." The second section, General References on the Spatial Structure of Comprehensive Health Planning, consists of publications on health planning, health economics, the process of planned change, geographical method and theory, and analytical techniques. Complete source information is provided for all references.

0705 Dunaye, T.M., Foote, B.L., Dunaye, S.L. *Health planning applications of operations research and systems analysis: a selected bibliography.* Monticello, Ill., Council of Planning Librarians, Exchange Bibliography 233, Nov 1971. 20p. Engl.

In this selected bibliography, literature on computer, engineering, and quantitative applications in community health services has been listed alphabetically by author name. Although these references are not all-inclusive, they do represent a substantial inventory of publications up to November 1971. The bibliography is directed to health planners and administrators. Approximately 300 references are cited, including books,

scientific reports and technical documents, journal articles, and bibliographies (without annotations).

0706 Elling, R.H., ed(s). *Health systems and health planning in international perspective.* Monticello, Ill., Council of Planning Librarians, Exchange Bibliography 265, Mar 1972. 52p. Engl.

This bibliography consists of three separate short bibliographies. The first, entitled Contribution of Social Epidemiology to the Study of Medical Care Systems: the Need for Cross-Cultural Research, lists 17 references with extensive annotations. The second bibliography is a Selected Annotated Bibliography of Publications Available in English on Health Planning in International Perspective. Approximately 90 references to literature dealing specifically with health planning are listed. The third bibliography, entitled Selected Illustrative Bibliography of Publications Available in English on Comparative Health Service Systems, with Annotations, contains 64 references. These have been grouped according to the following subheadings: "Descriptive cross-national studies" (publications of historical interest, general international studies, reports on European and American countries, etc.), "Studies of individual countries," "Cross-national research in specific aspects of medical care," and "Discussions of research methodology."

0707 Elliott, K., Morley, D., Ainger, D. Intermediate Technology Development Group, London. Ciba Foundation, London. University of London, Institute of Child Health, London. *Medical auxiliary training: a provisional bibliography.* London, Intermediate Technology Development Group (ITDG), Dec 1973. 28p. Engl.
Unpublished document.

Following publication in 1971 of *Health Manpower and the Medical Auxiliary,* the Intermediate Technology Development Group prepared this subsequent bibliography in response to requests for more information about texts and teaching aids for auxiliary health workers. This bibliography, containing information collected up to December 1973, includes addresses of all contacts expressing interest in the project, direct teaching material, material that may be usefully absorbed into teaching courses with or without adaptation, general guidelines of health auxiliary training and use, general source material (audiovisual aids, etc.), and a list of known training programmes and operative schemes.

0708 Freyvogel, T.A., ed(s). *European schools and institutes of tropical medicine and hygiene and their cooperation with overseas countries.* Tropical and Geographical Medicine (Haarlem), 19(2), Jun 1967, 77-137. Engl.
French version published in Acta Tropica (Basel), 21(2), 1967.

The activities and characteristics of cooperating schools and institutes of tropical medicine in Belgium, Czechoslovakia, Germany, the Netherlands, Poland, Portugal, Switzerland, and the United Kingdom are documented. Their tasks include: basic practical research conducted in Europe and in the developing countries; training (initially in Europe, due to the availability of suitable facilities, but completed in the target country) of European physicians, biologists, and possibly high-class paramedical personnel for overseas work; assistance in the establishment and running of teaching and research units in overseas countries; and secondment of research workers and teachers to existing overseas institutions. To meet these demands every institute should have a double staff, occupied alternately in developing countries and at the home base. The importance of maintaining a close connection between the tropical institute and the university is stressed.

0709 George Washington University Medical Center, Biological Sciences Communication Project, Washington, D.C. *Delivery of health care services in less developed countries: a literature search.* Washington, D.C., George Washington University Medical Center, Jun 1973. Suppl. 33p. Engl.
See also entry 710.

This bibliography contains references that were not received in time to be included in its preceding publication *Delivery of Health Care Services in Less Developed Countries with Emphasis on Integration of Family Planning with Maternal and Child Health: a Literature Search.* In this issue the emphasis is on actual achievements in the delivery of health services. A total of 95 annotated references appear, arranged alphabetically by personal and corporate author. A country and organization index is also included. A few examples of the type of entries include the following: *Health and Population-Reciprocal Relationships; The Health Centre Doctor in India; Population Trends in an Indian Village; The Malawi Public Health Program,* etc.

0710 George Washington University Medical Center, Biological Sciences Communication Project, Washington, D.C. *Delivery of health care services in less developed countries with emphasis on integration of family planning with maternal and child health: a literature search.* Washington, D.C., George Washington University Medical Center, Feb 1973. 48p. Engl.
See also entry 709.

This bibliography includes 180 items arranged alphabetically by personal and corporate author. Annotations accompany all entries except those that could not be located, or where the titles adequately indicate the contents. There are two indexes: one includes all personal names listed in the citations and/or descriptive notes, and the other includes countries and identifies organizations mentioned in the citations. Literature was requested from social services and church-related organizations, embassies of developing countries, and abstracting and indexing services such as *Excerpta Medica, Index Medicus, Current Publications in Population/Family Planning,* etc., as well as published and unpublished bibliographies. The subject scope emphasizes integration of family planning with maternal and child care in the health services of developing countries. An indication of the type of literature collected can be

seen from the following entries: *The Role of the Health Centre in an Integrated Health Programme in a Developing Country; Integration of Family Planning with a Public Health Programme; Maternal Nutrition and Family Planning*, etc. An analysis of the literature and country-by-country reports on literature dealing with family planning/maternal and child health follow the bibliographic citations.

0711 India, Ministry of Health and Family Planning. *Directory of paramedical institutions in India 1968.* New Delhi, Ministry of Health and Family Planning, 1968. 74p. Engl.
Unpublished document.

This directory lists training courses available in India during 1968 for various types of paramedical workers including health inspectors and visitors, public health nurses, dais, medical assistants, auxiliary health workers, etc. The name and address of the institution offering each course is listed together with entrance requirements, course duration, qualification awarded on completion, number of vacancies, and tuition fees, if any. For example, in Bihar State, trained dressers can take a condensed course for health inspectors at the Public Health Institute at Patna; the course lasts 3 months, it can accommodate 50 students, no fee is charged, and a certificate is awarded by the state government Department of Health Services.

0712 International Association of Rural Medicine, Nagano, Japan. *Bibliographic Index No. 1.* Nagano, Japan, International Association of Rural Medicine, Commission on Living and Working Conditions, Apr 1973. 57p. Engl.

This bibliography contains references to scientific papers written by members of the International Association of Rural Medicine. These publications, which concern rural living and working conditions, appear in one or more of seven categories: general diseases in rural communities; labour, hygiene, and occupational diseases associated with agricultural work; living environment vis-a-vis the farmer's health; hygiene of soil and water (sanitation and pollution problems); outdated living and working practices; health control programmes; and a miscellaneous category. A complete list of members of the association's Commission on Living and Working Conditions is also included.

0713 Lyle, K.C. *Birth control in China: a research bibliography.* International Review of Modern Sociology (Lucknow, India), 4(1), 1974, 91-99. Engl.

This bibliography of birth control in China covers sociological and medical literature, including books, chapters of books, conference papers, and journal articles, augmented by a small number of important titles from Chinese sources, mostly newspaper articles. It contains two sections: the People's Republic of China and Taiwan. Subject categories under the People's Republic of China include general aspects, population policy, programmes and services, and newspaper articles. Subjects treated under Taiwan include: general aspects, programmes and services, contraceptive methods (intrauterine contraceptive devices, systemic contraception, abortion, vaginal contraceptives), and newspaper articles. The body of the bibliography is arranged alphabetically by single or senior author and date of publication. Journal articles are identified by volume number, pagination, and date of issue. (Revised author abstract.)

0714 Moodie, P.M., Pedersen, E.B. *Health of Australian Aborigines: an annotated bibliography.* Canberra, Australian Government Publishing Service, Service Publication No. 8, 1971. 248p. Engl.

This bibliography presents nearly 2 000 references dealing with the health of Australian aborigines. Entries have been listed alphabetically according to author. References have been indexed under multiple subject headings in two sections: the first deals with specific diseases or disease groups; the second deals with special topics related directly or indirectly to health and disease, such as anthropology, ecology and environment, nutrition, medical services, traditional medicine, etc. Brief annotations accompany many of the citations. A locality (geographical) index is also provided.

0715 Pareek, U., Chattopadhyay, S., Advani, M., ed(s). National Institute of Health Administration and Education, New Delhi. *Population, family planning and health behaviour in India: an annotated bibliography.* New Delhi, National Institute of Health Administration and Education, NIHAE Research Report Nos. 6(1), 6(2), and 6(3), 1972. 3v.(1070p. total). Engl.

In this bibliography the authors have compiled the literature published between 1940 and 1969 on the subject of population, family planning, and health behaviour in India. In three volumes, 3 868 references have been abstracted and divided into the following sections: Volume I, Population; Volume II, Population Control and Family Planning; and Volume III, Public Health – Epidemiological Aspects, Public Health – Administrative Aspects, Medical Care and Hospital Administration, and Training, Education, and the Professions. In Volume I, Population, the subsections deal with: migration, demography, population, and economic problems, etc. Volume II covers contraceptive technology, sterilization, abortion, etc. Volume III includes health surveys, public health statistics, epidemiology, communicable and noncommunicable diseases, diet and nutrition, maternal and child health, school health, health education, sanitation, planning evaluation, health economics, medical care, hospital administration, specialized medical institutions, comprehensive health care teaching in medical colleges, education and training in the public health field, and professions and manpower. Entries have been listed alphabetically by author within each section.

0716 **Simmons, O.G., Berkanovic, E.** *Social research in health and medicine: a bibliography.* In Freeman, H.E., Levine, S., Reeder, L.G., eds., Handbook of Medical Sociology, Englewood Cliffs, N.J., Prentice-Hall, 1972, 523-584. Engl.

This selective bibliography provides an overview of the literature in medical sociology, most of which has already been published in various journals. The bibliography is divided into nine parts, and within each part the publications are listed alphabetically: (1) General, Introductory, and Historical Statements; (2) Health Behaviour of the Individual; (3) Knowledge, Attitudes, and Reactions of the Layman; (4) Relationship Between Patients and Health Professionals; (5) Organization of the Delivery of Medical Care; (6) Health Professions; (7) Social Epidemiology; (8) Epidemiological and Aetiological Aspects of Mental Problems; (9) Sources of Information About Medical Sociology. The entries do not contain any abstracts.

0717 **Strauss, M., Aronoff, L.** *Bibliography of periodicals for the health planner.* Monticello, Ill., Council of Planning Librarians, Exchange Bibliography 102, Oct 1969. 9p. Engl.

Eighty-six periodicals of interest to health planners are listed alphabetically by journal title. Information in the form of addresses, subscription rates, and brief annotations (accompanying some entries) is included. The periodicals cover a broad range of topics related to health planning. Some examples include: *Journal of Health and Social Behaviour*; *American Journal of Public Health*; *The Nation's Health*; *Scientific American*; and *Health Rights News*.

0718 **University of Hawaii, Honolulu.** *Bibliography: traditional medicine in Indonesia.* Honolulu, University of Hawaii, n.d. 1v.(unpaged). Engl. Unpublished document.

About 200 books and articles concerned with the practices and beliefs of traditional medicine in Indonesia are listed in this bibliography. The titles selected refer to Indonesian folk medicine, medical superstitions, witchcraft, birth control, etc. The compiler has attempted to include all relevant books and pamphlets in English, Indonesian, Dutch, French, and German, catalogued as of March 1971 in the Library of Congress, the National Library of Medicine, and the libraries of Cornell University and the University of Hawaii, all in the USA.

0719 **USA, Agency for International Development, Department of State. USA, Department of Health, Education, and Welfare.** *Report on the health, population, and nutrition activities of the Agency for International Development, Department of State, for fiscal year 1972.* Washington, D.C., Department of Health, Education, and Welfare, Office of International Health, Jul 1973. 427p. Engl.

This report details the health, population, and nutrition activities of the U.S. Agency for International Development during the fiscal year 1972, its monetary commitments, and, to the extent possible, progress during the reporting year toward project goals. Summary tables list the allocation of funds by country and region for the different types of activity, and individual entries on the specific projects note the project name and number, commencement and estimated termination dates, project description, and the funding. Also contained in the report are data on the number, qualifications, and distribution of AID staff.

0720 **USA, Department of Health, Education, and Welfare.** *Index medicus: including bibliography of medical reviews.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH)76-252. Engl.

Index Medicus is a bibliographic listing of references to current articles from approximately 2 250 of the world's biomedical journals. Coverage is limited to periodic literature; proceedings of congresses, symposia, and similar materials are not indexed unless published in periodicals. Each monthly issue is arranged in four sections, with separate author and subject indexes for the main body of references and also for the bibliography of medical reviews. Each entry contains the title of the article, senior author (if more than one) or sole author, journal title, volume number, inclusive pagination, and notification of the language if other than English. Each article is cited under several subject headings that represent its most important concepts; the complete list of current indexing terms, *Medical Subject Headings* (MESH), is published annually as part 2 of the January *Index Medicus* or may be obtained separately. It contains approximately 8 500 subject headings (e.g., environmental health, epidemiology, developing countries, health manpower, mobile health units, health services) that are arranged alphabetically, with cross references, and in categorized lists. A cumulative annual index is also available. *Index Medicus* is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, and the annual subscription (12 issues plus MESH) for 1975 is $173.05 in the USA, or $216.35 foreign.

0721 **Venezuela, Ministry of Health and Social Welfare.** *Indice bibliografico por autores y por materia de la "Revista Venezolana de Sanidad y Asistencia Social": Anos, 1940-1972. (Bibliographic index by author and subject of the "Venezuelan Review of Health and Social Welfare": 1940-1972).* Revista Venezolana de Sanidad y Asistencia Social (Caracas), 38(1-2), Jan-Jun 1973, 1-297. Span.

Medical and scientific articles concerned with public health in Venezuela are published in the *Venezuelan Review of Health and Social Welfare*. This particular issue contains the titles of all papers included in the publication from 1940 to 1972, and these are arranged under author and subject indexes. The papers cover a

wide range of topics such as malaria eradication, child care, health services administration, epidemiology, and rural hygiene.

0722 WHO, Copenhagen. *Rural health services.* In Health Planning and Health Economics in Countries of Eastern Europe: Abstracts of Books and Articles, 1965-1969, Copenhagen, WHO, 1971, 69-83 and 145-147. Engl., Fren., Russ.
See also entry 723.

This is a collection of English language abstracts of 37 documents (one book, 36 journal articles) that were published in various East European languages. Each abstract is accompanied by the original and translated titles, the author's name, and publication details. They deal with the planning, organization, implementation, and evaluation of rural health services in Eastern Europe, including ophthalmological and dental services, health education, outpatient care, hospital facilities, etc. Most articles refer to the USSR, but others are concerned with Bulgaria, the German Democratic Republic, Hungary, Poland, Rumania, and Yugoslavia.

0723 WHO, Copenhagen. *Health planning and health economics in countries of Eastern Europe; abstracts of books and articles, 1965-1969.* Copenhagen, WHO, 1971. 172p. WHO/EURO/4102. Engl., Fren., Russ.
See also entry 722.

Abstracts of literature on health planning and health economics published between 1965 and 1969 in Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Rumania, USSR, and Yugoslavia are contained in this bibliography. The material is classified under two main headings, health planning and health economics. Under the former, subheadings include the following: general problems, hospital services, outpatient services, specialized medical care, rural health services, and manpower planning. Under the latter, subheadings include general problems, budgeting and finance, hospital services, outpatient services, rural health services, cost/benefit studies on prevention, rehabilitation, drugs and pharmaceutics, and staff productivity.

0724 WHO, Geneva. *World directory of medical schools 1970.* Geneva, WHO, 1973. 147p. Engl., Fren.

Compiled by the World Health Organization, this directory lists medical schools throughout the world that were in full operation during 1970. The schools are listed alphabetically by country, city, and institution, in that order. In addition to the name and address of the school, information is given on the year instruction commenced, conditions of admission, duration of studies, type of degree or diploma awarded, language of instruction, the number of students admitted in 1970, and the number who graduated in that year. To facilitate frequent revision, this volume includes only those schools listed by the governments of the countries in which they are located as recognized institutions of education that confer a medical degree or diploma. A special annex lists the number of medical schools and the population for each country represented in the directory. The directory has been prepared as a bilingual publication in English and French.

0725 WHO, Geneva. *World directory of schools of public health.* Geneva, WHO, 1972. 277p. Engl.

This directory, compiled for the academic year 1970–71 by the World Health Organization, lists about 121 schools of public health in 44 countries. It is intended as a reference work for medical educationalists, prospective postgraduate students, and those concerned with the administration of fellowships and exchange programmes. Medical schools that offer appropriate basic postgraduate public health training are included, whereas those offering only an undergraduate course in public health, or specialized courses in particular branches of public health, or who provide training for personnel other than physicians, are not. The institutions are classified according to country, each of which is dealt with in a separate chapter. The text of each chapter is subdivided into six parts: general information about the institution, courses offered, admission requirements, curriculum, examinations, and qualifications offered. At the end of each chapter, the schools are tabulated alphabetically, indicating the address, year public health course began, number of teaching staff, enrollment in each course offered, and total enrollment, for each institution.

0726 WHO, Geneva. *World directory of post-basic and post-graduate schools of nursing.* Geneva, WHO, 1965. 223p. Engl.

This directory, prepared by the World Health Organization, describes the salient features of higher nursing education in 57 countries. The data included in this volume are intended as a general guide to those seeking information on the facilities and resources for further education of graduate nurses. The directory is based primarily on information supplied by the governments concerned and on replies to a questionnaire distributed to individual teaching institutions. The information contained in this volume refers to the year 1962 unless otherwise stated. Countries are listed in alphabetical order and each is dealt with in a separate chapter. After each chapter, the schools in the particular country are listed alphabetically in a table, first by city, then by institution. Specific information provided for each institution includes name and address, year instruction started, teaching staff, total enrollment, courses offered, number of students admitted, number of graduates, tuition fees, and facilities for board and lodging.

0727 WHO, Geneva. *Medical education; annotated bibliography, 1946-1955.* Geneva, WHO, 1958. 391p. Engl.

Some 2 600 items on medical education are presented in this World Health Organization bibliography. The material is classified under the following headings: history of medical education – aims, trends, and general considerations; special subjects (e.g., allergy, anatomy,

bacteriology, cancer, etc.); premedical education; students (selection and admission, coeducational aspects, health, attitudes, activities examination, etc.); teachers (qualifications, recruitment, standards, etc.); curriculum; the patient in medical education; academic teaching; audiovisual aids; research in medical education; the medical school in the community; and internship and licensure.

II. Organization and Planning

II.1 Health manpower

See also: 0796, 0823, 0829, 0831, 0849, 0852, 0866, 0878, 0884, 0891, 0915, 1061, 1066, 1082, 1122, 1128, 1131, 1137, 1138, 1139, 1145, 1153, 1158, 1159, 1162, 1179, 1183, 1186, 1188, 1194, 1200, 1210, 1314, 1327

0728 **Ademuwagun, Z.A.** *Relevance of Yoruba medicine men in public health practice in Nigeria.* Public Health Reports (Washington, D.C.), 84(12), Dec 1969, 1085-1091. Engl.

Seven reasons why the traditional Yoruba medicine men (Nigeria) would be a valuable addition to the health team are presented. Briefly outlined, they are as follows: (1) the medicine men could fill the health care vacuum created by a shortage of health manpower and the high cost of training modern health workers; (2) they already possess traditional skills in treatment, prevention, and rehabilitation; (3) their treatment techniques use an astute approach to human ecology and health; (4) belonging to the same culture as their clients, they share common beliefs, values, and symbols of communication with them; (5) they are effective in some aspects of psychosomatic medicine and in the use of local herbs, roots, and barks for some treatments; (6) they are unhampered by inadequate transportation, being already in situ; and (7) they have skills in interpersonal relations, including counseling with empathy and concern. The author feels they could play a crucial role in fitting new ideas into the existing culture and suggests several ways the medicine men could become engaged in health problem-solving.

0729 **Andrade, J.** Pan American Health Organization, Washington, D.C. *Participation and responsibilities in health manpower planning: the case of Venezuela.* Washington, D.C., Pan American Health Organization, 1973. 9p. PAHO/HR/CPP/D/6. Engl.

Health manpower planning is vital to the productivity of the population and the economy of the nation, but the responsibility for this planning can be lost among the complex interrelationships of the three sectors usually involved – national planning, health, and education. Therefore, one specific institution should possess the necessary authority and resources to develop and implement plans, to maintain continuity, to ensure the cooperation of the different parties involved, and to try and withstand political and other pressures. This unit should be located in the health sector where it can ensure that the manpower fits the services it should provide. The author illustrates the areas of overlap between the three sectors with particular reference to Venezuela and describes the functions, responsibilities, and relationships of a new government department created in 1972; this is the Health Manpower Development Office, located within the Ministry of Health and Social Welfare. Its duties include: (1) research into the measurement, registration, processing, and utilization of data on health manpower characteristics, availability, productivity, etc.; (2) development of techniques for planning and training; (3) coordination of activities and development of uniform standards for the training of staff and health personnel; (4) provision of technical assistance to other departments and to health and educational institutions in the programming and development of training schemes; and (5) liaison between the ministry and the teaching institutions. By maintaining close contact with other government departments, national associations, health associations, and teaching centres, the department should avoid unnecessary duplication and a costly superstructure.

0730 **Argentina, Ministry of Social Welfare.** *Politicas, estrategias, y programas del Departamento de Recursos Humanos e Investigacion. (Policies, strategies, and programmes of the Department of Human Resources and Research).* Buenos Aires, Ministry of Social Welfare, Jun 1971. 12p. Span.

The principle objectives of Argentina's Department of Human Resources and Research are to staff the country's health services and programmes, and to promote, coordinate, and evaluate research carried out by the Undersecretariat of Public Health. To meet these objectives, a step-by-step planning procedure is followed: specific, constituent objectives are identified, and the corresponding policies, strategies, and resulting programmes are tabulated. As an example, for the constituent objective "to determine and procure the necessary personnel for the nation's public health programmes" one of the corresponding policies is to remedy maldistribution of physicians; its corresponding strategy is to procure a health service in rural areas through an agreement with the armed forces. The resultant programme requires physicians to serve in rural areas in lieu of other military obligations. This particular programme and six others have been identified as "critical" for the period 1971-76. The six others concern the national plan for nurses; the establishment of continuing education for all members of the health team; the training of

laboratory technicians, multipurpose hospital auxiliaries, and X-ray technicians; and social security programmes to encourage physicians to settle in rural areas.

0731 **Bell, C.O., Bassett, J.D.** Papua New Guinea, Department of Public Health. *Manpower projections.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 627-647. Engl.
See also entry 823.

Manpower requirements for health services in Papua New Guinea have been projected to the early 1980s. Doctors, health extension officers (medical assistants), nurses, health inspectors, and various grades of dental officers are considered individually. There is also a discussion of their roles in the health service, their present numbers, distribution, existing and preferred manpower, population ratios, expected numbers of new graduates, and projected needs throughout the country.

0732 **Benjamin, B.** WHO, Geneva. *Health manpower and hospital utilization.* WHO Chronicle (Geneva), 25(12), Dec 1971, 541-546. Engl.

This WHO survey provides international statistics on medical manpower and its utilization, and hospitals and their utilization. These data are of interest to health economists since hospital treatment of disease is a heavy consumer of manpower resources everywhere. International comparison is rendered difficult by the different terminologies particular to each country. To overcome this problem, a list of terms used by various countries for different grades of auxiliaries (described according to type and length of education) has been drawn up. It is noted that where medical assistants are employed, they are generally still scarce and in many cases represent only a fraction of the number of physicians, whose scarcity is already well known. Tables illustrate population per physician and medical assistant per physician ratios in selected African, American, Asian, European, and Oceanian countries.

0733 **Bennett, F.J., Hall, S.A., Lutwana, J.S., Rado, E.R.** *Medical manpower in East Africa: prospects and problems.* East African Medical Journal (Nairobi), 42(4), Apr 1965, 149-161. Engl. 13 refs.

This paper calculates medical manpower needs in East Africa for the next 15 years and also, less certainly, for the long-term period from 1980 to 2000. An annual output is needed of 100 doctors for each of the mainland territories in the 1970s to allow for the growth of population and to improve the doctor:patient ratio to 1:10 000 by 1980. In the longer term it is important to remember that by 1985 the population of East Africa will exceed 50 million, and the need to plan carefully is imposed not only by demographic expansion but by the aspirations of East Africans for better standards of medical care. These calculations imply the immediate need to expand the medical school structure in East Africa, to retain and expand the programme for training medical auxiliaries, and to plan medical services to utilize to the best advantage the special training of doctors. This will entail spending on an integrated curative, preventive, and promotive service rather than on an exclusively curative one. (Modified author's abstract.)

0734 **Choudhuri, P.K.** *Rural health problems: a review.* Journal of the Indian Medical Association (Calcutta), 58(12), 16 Jun 1972, 468-470. Engl.
See entry 835 for complete proceedings.

The author acknowledges the shortage of medical personnel in rural areas of India and wonders whether vested interests, bureaucracy, or mishandling by "armchair experts" perpetuates the problem. He comments that the Government of India has repeatedly refused to adopt proposals from the Indian Medical Association and then outlines another programme to alleviate the shortage. The first phase would incorporate registered local practitioners into rural health centres part-time; offer practitioners who are willing to settle in rural areas subsidies for 5-7 years or easy-payment loans through nationalized banks; assure young doctors in service of early promotion, extra increments, and other incentives for practice in rural areas; mobilize medical units; and properly staff, equip, and supply existing health centres. The second phase would concentrate on establishing medical training in rural areas, but the author recommends that, in the mean time, spaces be allotted in existing medical colleges for students from rural areas, and that social workers be employed to make medical students aware of the plight suffered by rural populations.

0735 **Drayton, H., Evans, G.P.** *Regional project for the formation of personnel for health services: the Commonwealth Caribbean.* Washington, D.C., Pan American Health Organization, 1973. 13p. PAHO/HR/CPP/D/27. Engl.
Pan American Conference on Health Manpower Planning, Ottawa, 10-14 Sep 1973.

The planning and development of a regional project for the education and training of allied health personnel in the Commonwealth Caribbean illustrates a practical approach to health manpower planning. Because of the manpower problems (insufficient numbers, maldistribution, poor utilization) and the inadequacy of training facilities in the region, an overall training plan was required. The planners decided that a shared, regional project, using multidisciplinary teaching centres would offer economy and efficiency. Programme content will closely relate to the area's health service requirements and will emphasize in-service education, although a general-purpose curriculum will form its core. An adequate number of full-time tutors must be trained. To establish the appropriate size of the training programme, manpower requirements have been estimated (the methods and data generated are described), and a team of experts plans to visit each country to locate suitable teaching institutions, determine additional staff and equipment needed, estimate budgets, and advise on the necessary administrative procedures. It is

also proposed that a Caribbean Community Health Association be formed to help ensure a team approach and to assist in establishing and maintaining appropriate standards of education and training.

0736 **Fendall, N.R.** *Rational use of health manpower.* World Medical Journal (New York), 20(6), 1973, 104-106. Engl.

There are some 1.5 million physicians in the world: of these, approximately 1.2 million live and work in the "privileged" countries, where less than one-third of the world's population resides. The same imbalance exists for other health professionals and paramedical personnel, and the rate at which personnel graduate from training programmes is lagging behind the population growth rate. Nevertheless, health services must cater to both quantitative and qualitative demands, to ambulant care and institutional care, to medical care and health care. People who are surrounded by a multiplicity of disease demand curative medicine as an overriding priority and will not participate in preventive measures until some curative service is provided. The answer to this dilemma is to reconstruct the health team on two tiers. The first, which provides for quality of care, would be made up of highly trained professionals restricted to referral care or consultant and advisory roles and located in hospitals. The second tier, which provides for the quantitative aspect of cure, would comprise middle-level health workers trained to provide primary care, i.e., extensions of, not replacements for, the high level personnel. Operating from a health centre, three basic types of auxiliary would then offer primary medical care (mainly curative work), community-oriented MCH care (including family planning), and communicable disease control.

0737 **Fendall, N.R.** *Philosophy and definitions.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 1-8. Engl., Fren.

See also entry 1137.

Developing countries face a quality-quantity dilemma in choosing a suitable type of medical care – the "philosophy of the best" versus the "philosophy of the most." To have any significant impact on standards of health, related services must attempt to achieve a total outreach as rapidly as possible. However, the demand for new knowledge and new technologies to treat individuals is in conflict with the wider application of existing knowledge and techniques to treat the impoverished majority. The physician must play his part as a member of the community development team, but professional health personnel are expensive both to train and to employ. The development of simple criteria for diagnosis, treatment, and aftercare, combined with a system of referral and supervision, will permit auxiliary health workers to perform many of the physician's functions at a lower cost. The auxiliary has a lower level of education but is trained for specific work, in the use of selected tools of medicine, and to a predetermined level of competency. The author discusses the ways in which economic and social characteristics common to developing countries favour this approach, although national attitudes to the use of auxiliaries are varied. He also provides definitions of some frequently used terms: "professional," "subprofessional," "paramedical," "auxiliary," "ancillary," "traditional healer," "traditional midwife," and "medical assistant."

0738 **Fendall, N.R.** *Categories of auxiliaries.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 9-20. Engl., Fren.

See also entry 1137.

Three general categories of medical auxiliary can be defined: (1) the "monovalent auxiliary" – trained for a single function or specific functions in relation to a specific disease (e.g., yellow fever vaccinator); (2) the "polyvalent auxiliary" – the multipurpose worker (e.g., dispensary auxiliary); and (3) the "basic health worker" – the elementary, all-purpose worker at the village level. In many countries with well-developed systems of auxiliary health manpower the pattern of auxiliary types and grades is similar; it indicates trends in two directions: (1) the evolution from the era of untrained attendants, through the era of single-purpose workers, to the era of multipurpose auxiliaries; and (2) the gradual upgrading of standards in educational levels. For most health situations, experience shows that auxiliaries can be trained to provide a number of skills, and that multipurpose workers can adapt much more readily to rapidly changing circumstances. Each country must predetermine exactly what types and grades of auxiliaries it needs and precisely what duties, skills, and responsibilities will be required of such persons. Auxiliary status in the health personnel hierarchy and opportunities for promotion also need to be determined. A discussion of the auxiliary in the Nigerian military system emphasizes the advantages of its hierarchical structure and well-organized but flexible training programme.

0739 **Gish, O.** *Doctor auxiliaries in Tanzania.* Lancet (London), 2, 1973, 1251-1254. Engl.

The role of the auxiliary in the implementation of Tanzania's health services since independence in 1961 is examined. The importance of this role was enhanced by the enunciation of the Arusha Declaration in 1967. Fundamental to this declaration, which put Tanzania on the path of socialist development, was the objective of self-reliance in all sectors. Recognizing that self-reliance in the health sector could not possibly be realized through a system that proclaimed the registered doctor as its primary medical practitioner, Tanzania sought to step up production of already-existing auxiliary cadres: assistant medical officer (AMO), medical assistant (MA), and rural medical aid (RMA). Through upgrading courses that follow a prescribed number of years employment, it is now possible for an RMA to become an MA, an MA to become an AMO, and an AMO to become a registered doctor. The present health development plan envisions a network of 300 rural health centres and 2 300 rural dispensaries at a ratio of one rural health centre to 50 000 population, and one rural

dispensary to 6 000 population by 1980. Both centres and dispensaries will be staffed and directed by auxiliary cadres (MAs, RMAs, etc.). A table illustrates recent changes in the output of health personnel, with the distribution in favour of the MAs and the RMAs. Finally, it is pointed out that because so much leadership responsibility is expected of the medical auxiliary, and because his working situation keeps him isolated from other members of his profession, the importance of providing him with possibilities for continuing education cannot be overemphasized.

0740 **Golladay, F.** Pan American Health Organization, Washington, D.C. *Substituting allied health personnel for physicians: a survey of methods and results.* Washington, D.C., Pan American Health Organization, 1973. 18p. PAHO/HR/CPP/D/5. Engl.

When planners attempt to project health care needs, the common practice is to establish a target ratio of health manpower to population; this assumes that the delivery of health care and methods of diagnosis and therapy will change little in the future. In particular, the projections usually fail to recognize innovations in the utilization of allied health manpower (especially the physician's assistant). This paper examines two recently developed models for substitution of health personnel, on the premise that current patterns of manpower utilization are wasteful. One of the models employs "manpower activity analyses," whereby every procedure is broken down into its component parts; alternatives (including delegation of responsibilities) for each part are examined; and the most economical, acceptable sequence is determined. The second method is the "production function approach"; it assumes that the physician-manager is motivated to obtain maximum output from his resources at the lowest possible cost (e.g., numbers and qualifications of staff, number of home visits). The physician, however, needs much more information on managing health care units to organize the resources under his control. This paper algebraically describes these models, presents some experience on their application in the USA, and discusses their practical limitations.

0741 **Gris, G.B.** Papua New Guinea, Department of Public Health. *Thinking aloud on localisation.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 605-608. Engl.

See also entry 823.

The term "localization" may be defined in two ways: as the development of a local work force to incorporate local philosophies and aspirations in the machinery for attaining social goals; or as a process whereby aliens in the public service are replaced by local citizens. The author believes that the benefits of localization outweigh any disadvantages, as it encourages a convergence of political, social, and economic aspirations not apparent when expatriates are making the administrative decisions and locals are making the political ones. The likely extent of localization of the Department of Health in Papua New Guinea is outlined, together with some questions on what constitutes a relevant health training programme for local personnel.

0742 **Hawley, T.G.** *News from the Pacific 1972.* Tropical Doctor (London), 3(1), Jan 1973, 41-44. Engl.

Following an enquiry into the region's future medical and dental manpower needs, the Commission on Medical (and dental) Education in the South Pacific made the following recommendations to the University of the South Pacific and the Government of Fiji: that the university replace its diploma-granting medical programme with a degree-granting programme whose graduates would become heads of the country's health teams; that a 2-year course be devised to convert diploma-holders to degree-holders; that the university establish a school of health sciences for the education of doctors and other medical cadres, ensuring that the courses offered include adequate practical training; and that the university develop a 3-year course to train a cadre of auxiliary known as the health officer who would perform and supervise activities in preventive medicine, maternal and child care, obstetrics, family planning, and health services administration. Estimated costs of implementing these programmes are tabulated. The study, however, has been judged too expensive and, for the moment at least, set aside. The problems to which it applied itself remain: the highest calibre of secondary student continues to opt for degree-granting programmes in other disciplines; present graduates continue to be overtrained for work in remote areas; and the health officer cadre, intended for primary clinical and preventive care at the grass-roots level, does not yet exist.

0743 **Jelliffe, D.B., Stanfield, J.P.** *Para-auxiliaries and medical manpower in tropical pediatrics.* Journal of Tropical Pediatrics (London), 14(4), Dec 1968, 199-200. Engl.

The dichotomy between the pediatric services desired by conservative elements (established medical schools, politicians, and wealthy elite) in tropical developing countries, and those needed by the rural and "new town" elements in these same countries, is exposed. The former clamor for Western-style diagnostic and therapeutic services, whereas the latter require basic preventive and promotive care. Some of the advantages of training "para-auxiliaries" – people with a limited background of formal education trained to carry out defined tasks – are set down. It is possible that by training rural dwellers who know the region and the language, coverage of the rural areas as yet untouched by modern medicine may be ensured. Also, the creation of a new profession may deal with the social problem created by large numbers of increasingly discontent, partly educated young people. The need for such personnel has already been experienced in most countries and is blocked only by a "rigidity of thinking and a conservative unwillingness to experiment."

0744 **King, M.** *Africa: to help millions.* World Health (Geneva), Jun 1972, 23-25. Engl.

The medical assistant, as he is known in the Sudan, Uganda, Kenya, Tanzania, Zambia, and Rhodesia, is possibly the most important single means of providing universal health care in the developing world. His main role is that of leader of the health centre team in rural health centres. He is proof that 85% of patients can be cared for by someone whose training is less than half as long and perhaps one-tenth as costly as that of the conventional physician. Leadership roles are so far limited to male workers. Tanzania's experience is used as an example in a discussion of career ladders. Some current needs in this field include further curriculum development, more communication media for medical assistants (such as *Afya*, a journal specifically for medical assistants), and further training in basic science.

0745 **Ko Ko, U.** *Auxiliary personnel in community health.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 145-147. Engl.

The author briefly describes different categories of auxiliary health personnel and their utilization, citing examples from developing countries. Although titles and specific duties in community health vary from country to country, WHO (1961) has proposed four basic categories: medical assistant, assistant nurse, assistant midwife, and assistant health inspector. There exists within this framework, however, a whole range of multipurpose auxiliary workers whose duties overlap rigid boundaries but that emphasize certain components of community health work. To encourage effective utilization of these auxiliaries, the planners must: define the objectives of employing auxiliary personnel; establish a realistic and well-balanced job description; select candidates with the highest educational attainment that the local situation permits; devise a relevant training programme; encourage the health team concept; provide efficient supervision and guidance as well as adequate technical and referral facilities; and create an organized career structure. With well-defined objectives and careful, systematic planning, the auxiliary worker should prove an asset in comprehensive health care services.

0746 **Northrup, R.S.** *Health manpower and organization.* In Chen, L.C., ed., Disaster in Bangladesh, New York, Oxford University Press, 1973, 95-115. Engl. 20 refs.

See also entry 1324.

In discussing medical manpower in Bangladesh prior to March 1971, it is noted that physician training of high quality received priority but was poorly adapted to the country's needs. Many physicians left the country; those remaining avoided rural practice. There is almost no economically feasible way of providing enough physicians to meet the entire population's needs. There are fewer nurses than doctors, since salaries have been poor and hours long and irregular. Lady health visitors (LHV) and health technicians represent the male and female "health assistant"; they are trained in endemic disease control, hygiene, preventive medicine, etc. Dressers, compounders, and dispensers are capable of providing simple curative medicine, and are willing to serve in rural areas. Other "healers," such as hakims, homeopaths, faith healers, and "quacks" are the only health resource for the majority of the people. Midwifery and family planning personnel include the nurse-midwife, trained midwife, trained dai, family planning visitor, family planning dai, and untrained dai. Availability of proper facilities is minimal in Bangladesh. The few hospitals are concentrated in urban areas. Rural health centres have lagged behind in development goals, and supplies and instruments for all health centres are scarce and expensive. Improvement of the existing manpower situation requires giving priority to training of subdoctorate personnel, both professional and auxiliary, and provision of facilities in which they can work. The organization of the health services facilities would range from many rural health units staffed by auxiliaries, to fewer rural health centres staffed by auxiliaries and professionals, to small and medium-size hospitals and major medical centres. It is recommended that admission requirements to auxiliary training programmes be reduced to attract more candidates and that training programmes be located in rural areas. Foreign aid could assist in planning the system, training personnel, and providing facilities.

0747 **Nursing Journal of India, New Delhi.** *World Health Day, 7 Apr 1967: "partners in health".* Nursing Journal of India (New Delhi), 58(4), Apr 1967, 79-92. Engl.

"Partners in health" refers to the health team, a key concept in health in the world today. Health activities are distributed among team members such that each can concentrate on the task for which he was trained while working together for a common goal. The team includes such personnel as economists, educators, and developers, as well as those involved in the medical field. The health team concept and the role of some of its members (physician, nurse, auxiliary, and sanitary engineer) are discussed in a general way. Examples of auxiliary health workers are taken from Morocco.

0748 **Oyediran, A.B., Kolawole, T.M., Akande, E.O.** *Provision of health manpower for Nigeria.* In Akinkugbe, O.O., Olatunbosun, D., Esan, G.J., eds., Priorities in National Health Planning: Proceedings of an International Symposium, Ibadan, Caxton Press (West Africa), 1973, 301-315. Engl.

The severe shortage of health manpower in Nigeria is aggravated by improper deployment of available trained personnel and by training programmes not sufficiently relevant to the needs of the nation. A functional analysis of the nation's health needs is a prerequisite to their satisfaction. A programme to train medical assistants failed because, although entrance qualifications for training were virtually the same as those for medical school, the fruits of study were less rewarding – the assistant emerged dissatisfied with his role as an

"inferior" form of doctor. The authors feel that Nigeria has the required variety of personnel to deal adequately with its problems but that a radical revision of the present curricula is required. They recommend that, rather than try to establish a new cadre of health worker, existing medical schools should seek to expand their facilities in order to accommodate the number of applicants. Since a large part of the work load concerns preventive measures, it is suggested that steps to train sanitary and water engineers be taken. Nigeria's particular problems and different cadres of health personnel are discussed individually under separate titles.

0749 Pan American Federation of Associations of Medical Faculties, Bogota, Colombia. *Proyecto de la Universidad del Valle, Cali, Colombia. (Project of the University of Valle, Cali, Colombia).* Bogota, Pan American Federation of Associations of Medical Faculties, Nov 1973. 69p. Span. Unpublished document.

To avoid the conceptual errors that have dominated health policies in Colombia, a new approach considers the health of the community and emphasizes preventive medicine. The project aims at regionalization of medical services in the hopes of eliminating inequalities between urban and rural health care. The restructured service will coordinate university hospitals, peripheral hospitals, health centres, health posts, and private homes. This document outlines the plan of action and the area to be covered by the project; the physician's curriculum and his role in the health team; and the organizational, administrative, and financial aspects of the programme.

0750 Roy, H.K. *Rural health in India.* Journal of the Indian Medical Association (Calcutta), 40, 1 Feb 1963, 126-127. Engl.

Since 80% of India's population lives in rural areas, the significance of rural health care is apparent. The people are ever increasing their demand for rural health services. The problem, however, is linked with economic and educational development, which medical personnel have little to do with. The two biggest obstacles to rural health are malnutrition and communicable disease. Inadequate staffing in health centres holds back progress. An accurate assessment of problems is a prerequisite for adequate remedial measures. Shortage of medical personnel may be overcome by reemploying superannuated medical men. The problem of physician distribution can be overcome by establishing an All India Rural Health Service to ensure equidistribution of doctors throughout the country. If modern facilities are made available in peripheral villages, there should be little difficulty in attracting young doctors to work in rural surroundings. Periodic refresher training would further help establish doctors in villages.

0751 Senecal, J. *Needs and difficulties of training of health personnel in developing countries.* Israel Journal of Medical Sciences (Jerusalem), 1(3), May 1965, 351-360. Engl.

An analysis of the health problems in developing countries readily shows the need for public health services. Unfortunately, too many medical students are trained in foreign countries, or at least, in the European (predominantly curative) tradition. Often a developing country will maintain intact the full programme content of foreign health teaching, for fear of providing its students with a second-rate education. In this paper, economic, health, and educational characteristics of developed and developing countries are statistically contrasted to support the view that public health should be of prime concern in the training of medical students, paramedical personnel, and senior medical officers whose role is health planning. Statistical data are provided by WHO and UNESCO.

0752 Waheed, M. *Health manpower planning in a developing economy: India, a case study.* Indian Journal of Public Health (Calcutta), 17(2), Apr 1973, 53-61. Engl. 12 refs.

The purpose of health manpower planning is to provide sufficient medical personnel to meet the future demand of health services. The present study analyzes India's health problems and disease patterns, identifying the current and future supply of medical personnel and the demand for their services. The following data are set forth in six tables: estimated vital statistics (crude birthrate, crude death rate, and morbidity), for 1951-2001; population per doctor, per paramedical, and per inpatient, for 1951-2001; estimated demand for doctors in the private and public sectors; estimated demand for nurses according to bed, population, doctor, and health expenditure ratios; anticipated need for, and supply of, beds 1968-69; the actual and projected amounts spent on medical and public health, 1960-81. Findings show that an inadequate supply of medical and paramedical personnel, especially nursing personnel, in India has severely hampered improvement of health services. It is hoped that this paper will be useful to decision-makers in the field of health manpower planning.

0753 Weisz, F.H. *Delegation in medicine and dentistry.* Leiden, Netherlands, Noordhoff International Publishing, 1972. 212p. Engl. 208 refs.

Tasks that have normally been undertaken by physicians and dentists are analyzed to determine which ones may be effectively delegated to auxiliaries. Job descriptions of established paramedical cadres (medical laboratory technician, radiology technician, dental assistant, nurse, and midwife) are examined to see how they compare with these conditions, and results of innovations in task delegation, such as the insertion of intrauterine devices by paramedical or auxiliary workers, are examined. Surgical and obstetrical interventions performed by paramedical or auxiliary workers according to country are set forth in a table, and discussions of rural medical aid in Tanzania, barefoot doctors in China, feldshers in the USSR, physician assistants in

the USA, dental hygienists, optical technicians, auxiliary personnel in preventive medicine, etc. follow. Finally, the implications of introducing new paramedical workers are discussed.

0754 **WHO, Geneva.** *Education for the health professions.* WHO Chronicle (Geneva), 24(10), Oct 1970, 444-449. Engl.
Twenty-third World Health Assembly, Geneva, May 1970.
Too often developing countries adopt patterns of health care that are foreign to their culture and beyond their means, e.g., they put out funds for the education of physicians and nurses that would be better spent on training health auxiliaries. The discussions in this document focus on the need to educate and deploy a health personnel appropriate to the needs and resources of the region. The following five factors are essential to the securing of appropriate health personnel: (1) cooperation between health agencies and educational institutions; (2) judicious distribution of functions between professionals and auxiliaries, with emphasis on teamwork; (3) flexibility in the educational programme concerning type of personnel required and course content; (4) continuous education of all health personnel; and (5) systematic evaluation of manpower needs.

0755 **WHO, Geneva.** *Training of medical personnel in Africa.* WHO Chronicle (Geneva), 24(4), 1970, 167-168. Engl.
The numbers of qualified medical personnel trained in the WHO African Region still do not meet the demand. The countries in the region depend on nonnationals for about 60% of doctors and 70% of teaching staff, and on outside training institutions for the education of 43% of their medical students. A stricter, more rational approach to planning, based on a quantitative assessment of the existing situation, and the development of a curriculum more suited to the individual country's needs (rather than a carbon copy of a European curriculum) are recommended.

II.2 Organization and administration

See also: 0817, 0823, 0873, 0886, 0892, 0895, 0897, 0902, 0903, 0941, 0962, 1005, 1011, 1039, 1324, 1327, 1329, 1335, 1341, 1358, 1359

0756 **Badgley, R.F.** *Social policy and Indian health services in Canada.* Anthropological Quarterly (Washington, D.C.), 46(3), Jul 1973, 150-159. Engl.
Institutional and policy dilemmas inherent in the present Canadian Indian health services are discussed. These include legislative ambiguity between federal and provincial areas of responsibility and a division of responsibility between government departments such that the Medical Services Branch, Department of National Health and Welfare, is responsible for health but has no control over pollution, sanitation, and housing. These fall, instead, within the jurisdiction of the Department of Indian Affairs, and medical personnel are powerless to do anything but advise. Problems also arise from the lack of a coordinated service for information on Indians and their communities; lack of involvement on the part of the Indians themselves in health policymaking; and generally, the absence of a coherent and coordinated Indian policy. The author concludes that responsibilities for Indian health should be decisively delineated between federal and provincial governments and an institutional mechanism set up to ensure a continuous national appraisal of their health and social welfare.

0757 **Behrhorst, C.** *Thoughts on community services in low-production, physically deprived nations.* Chimaltenango, Guatemala, n.p., 1973. 15p. Engl.
A successful medical aid programme at Chimaltenango (Guatemala) is oriented toward the needs of the community and is described in terms of curative medicine, preventive medicine, and agricultural development. Indians selected from medically neglected communities are trained to recognize and treat common medical problems, but they also serve as "community catalysts" for such programmes as vaccination, literacy, family planning, health education, and agricultural improvement. Trained Indian women also travel to villages and work with families and groups to encourage and demonstrate aspects of community health. To ensure long-term health improvement, agricultural development has been included as an integral part of the programme, and is considered a must for all development planning.

0758 **Bible, B.L.** *Health care delivery in rural areas.* Chicago, American Medical Association, Jul 1972. 47p. Engl.
This pamphlet was written for persons concerned with delivery of health services to rural areas, especially in the United States. The booklet presents an overview of problems encountered in a variety of experimental projects now in operation in that country. It is hoped that these experiments will be useful to those interested in rural health programmes and the utilization of local health planning groups. Sketched are the plans for the following programmes: solo practice; the programmes of Lafayette and Gilchrist counties in Florida; Oklahoma's Project Responsibility; the Nurse Practitioner – Hope Medical Centre programme in Estancia, New Mexico; Presbyterian Medical Services in New Mexico; the programme in Lawrence County, Alabama; the Demonstration of Multi-County Approaches in Central Pennsylvania; the Rural Health Project, Inc., in Southern Monterey County, California; the medex programme; Community Medical Services of the Medical Society of the State of New York; the Rural Health Associates programme in West Central Maine; and the Automated Devices project in Salem,

Missouri. A common theme appears evident in each of these programmes, i.e., that community involvement is vital in research, in definition of health care needs, in planning, and in evaluation of services.

0759 Boyd, E. *Health care in Mexico: a look at the Institute of Social Security.* Canadian Medical Association Journal (Ottawa), 110, 16 Mar 1974, 713-719. Engl.

The author comments on the health services in Mexico, particularly the organization and activities of the Mexican Institute of Social Security (IMSS), which provides medical care for 25% of the population. (About 10% of the population obtains private medical care, the army and government employees health plan caters to another 10%, and the Ministry of Health provides services for the remainder.) The IMSS is a comprehensive social security plan, the cost of which is shared among employers, employees, and the government. The author describes the facilities and services available at IMSS hospitals and clinics, both in Mexico City and the rest of the country. He concludes that IMSS provides good health and social benefits for its members, but he makes the following criticisms: (1) the ambulatory facilities do not appear to be as efficient in operation as on paper; (2) there is too much emphasis on curative medicine and not enough on preventive care; (3) management of patients referred to hospital lacks continuity; (4) administration appears "top heavy," both in buildings and in personnel; (5) IMSS is at the mercy of the workers' unions; (6) the use of trained paramedical staff for minor primary care is not being sufficiently exploited (and in some areas is being phased out); and (7) the Mexicans who are in greatest need of health care (i.e., peasants, the elderly, and others unable to pay) are excluded from the benefits and have only minimal facilities available to them through the government health service.

0760 Bryant, J.H. Christian Medical Commission, World Council of Churches, Geneva. *Community health care (review).* In Christian Medical Commission, Annual Meeting 1971, Geneva, Christian Medical Commission, 1971, 67-69. Engl.
See entry 839 for complete proceedings.

Three types of health care system, the role of the physician in each, and the concepts precipitating the change from one to another are discussed. The three systems are: the hospital; comprehensive or community health care; and community health care involving the active participation of the community in decision-making. The first deals with a limited number of people, all of whom are seen by a doctor, whose role is primarily that of a clinician. The second deals with great numbers of people, many of whom are seen only by auxiliaries; the doctor's role is that of manager of the team of auxiliaries working under him, as well as clinician. The third, that of community self-determination, involves the doctor as a manager, a consultant, and a leader, reducing his role as a unilateral decision-maker and increasing his role as a public servant. The first becomes the second upon the realization that only a small part of the people in need of medical attention are seen and can be seen by the hospital. The second becomes the third when the community reaches a state of awareness wherein it is willing to take responsibility for the decisions affecting it.

0761 Bull, M.R. *Health services in Algeria: the formation of a new service for a new country.* Nursing Mirror (London), 128(2), 10 Jan 1969, 31-33. Engl.

Following her independence in 1962, Algeria was faced with the reorganization of her medical system, which was left in chaos after 7 years of conflict. Various organizations contributed medical aid, among them the Comite Chretien de Service en Algerie (CCSA), a committee established in 1962 to coordinate aid given to the country by the world's Protestant churches. The CCSA began by providing people in badly affected areas with food, clothing, and medicines, and later expanded its contribution to include rural aid, social, and medical services. It introduced a "clinomobile" (later bought by the Algerians) for food distribution in isolated areas, and helped equip the Centre d'Enseignement Para-Medical, an institute for the training of nurses, rural midwives, laboratory and X-ray assistants, and sanitary inspectors. Through these newly trained personnel, the centre hopes to provide rural areas with sanitary education, a higher level of hygiene, and protection from epidemics.

0762 C.D.I. Bwamanda, Zaire. *Note concernant l'organisation de la supervision medico-sanitaire du soussecteur medical de Bwamanda-Secteur Mbari-Gemena. (Note on organizing and supervising medical and sanitary services in Bwamanda, Mbari-Gemena).* Gemena, Zaire, C.D.I. Bwamanda, Soussecteur Medical, 15 Jul 1971. 14p. Fren.

The methods used to evaluate the medical/sanitary state of the Bwamanda region, Zaire, and to raise the villagers' consciousness of their health problems are outlined. The methods include a health census, a health education programme, and the organization of medical and sanitary activities. Three existing agencies cooperate in implementing these activities: the mobile health unit, the village health committee, and the health centre. The mobile health unit, consisting of a sanitation officer, nurse, and four nurses' aides, collects data for the census as well as treating minor illnesses and performing vaccinations. The health committee of each village is responsible for advertising, organizing, and maintaining order during the interviewing campaign. The committee's role is a crucial one, since only continuous effort on the part of influential citizens will motivate the villagers to better their health situation. The health centres provide preventive medicine, information, and health education. Some suggestions for health education topics are included, with a sample lecture on the nutritive value of soya. The methodology of data collection is described, and conditions the nurse looks for during the physical examination are listed.

0763 **Carranza, L., Volio, F.J., Roig, T.A.** Costa Rica, Ministry of Public Health. *Programa adiestramiento medico: servicios que presta la unidad sanitaria a la comunidad y otros aspectos de importancia. (Medical training programme: services provided by the health unit to the community).* San Jose, Ministry of Public Health, 1972. 21p. Span. Unpublished document.

The right of the individual to good health and education has been acknowledged by the Costa Rican constitution. This document is a guide for all members of the medical profession receiving patients in their own offices or hospital clinics. It covers the administrative practices with which the doctor/nurse must comply and indicates the number of patients to be examined on an hourly basis. In Costa Rica, the rural health centre's most important service is that of maternal care. Maternity auxiliaries are appointed by the Ministry of Public Health subject to prior approval by the Nursing Department of the Ministry. However, doctors must be present at difficult births. Each health centre has a limited number of beds where such emergency cases can await transfer to hospital.

0764 **Costa Rica, Ministry of Public Health.** *Programa de salud en comunidades del area rural de Costa Rica. (Health care programme in the rural communities of Costa Rica).* San Jose, Ministry of Public Health, May 1973. 34p. Span.

In 1972, the Costa Rican government in cooperation with UNICEF launched a plan to upgrade rural health standards. Some 65.6% of the country's population lives in rural areas, an estimated 20% of these in communities of fewer than 500 inhabitants. Several steps have been taken toward implementing the programme. It is hoped that by the end of the decade, socioeconomic improvements will provide the necessary infrastructure for the extension of basic health care delivery systems to a broader rural area. "Minimum integral health services" include the following: malaria eradication, general sanitation, vaccination against communicable diseases, maternal and infant care, family counseling, statistical information, preventive medicine, training of auxiliary health workers, and community development. The elements making up the programme, methods of achieving the goals of the programme, and methods for evaluating the results are described.

0765 **Cuba, Ministry of Public Health.** *Cuba: organizacion de los servicios y nivel de salud. (Cuba: health service organization and level of health).* Havana, Ministry of Public Health, 1974. 131p. Span.

See also entry 766.

The Cuban national health system is based on four premises: (1) the health of the population is a responsibility of the state; (2) health services should be available to all; (3) the community should play an active part in their own health programme; and (4) health services should be preventive and curative. Due to the importance of the rural sector, the development of a rural health care system is one of the main preoccupations of the Cuban government. The development of the rural health services began in 1960 with the promulgation of Law 723, which established the Postgraduate Social Medical Service. This law compels newly graduated physicians to practice full time for 1 year in the rural areas of the country. Similar legislation governs other health personnel such as dentists, medical technologists, etc. The rural hospital is the basic rural health unit providing health care to a population ranging from 5 000 to 20 000. It has between 10 and 40 beds, utilized mostly for infant delivery and health care, and is staffed by various levels of health personnel, including physicians, nurses' auxiliaries, and support staff. Medical posts, permanently staffed by a general practitioner, extend coverage to remote areas and generally serve a sector population of 3 000-5 000. Homes for expectant mothers, who may not make it to the hospital in time for delivery, and centres for children recuperating from the effects of malnutrition, complete the network of services.

0766 **Cuba, Ministry of Public Health.** *Servicios rurales de salud. (Rural health services).* In Cuba: Organizacion de los Servicios y Nivel de Salud (Level of Health and Organization of Services), Havana, Ministry of Public Health, 1974, 23-61. Span.

See also entry 765.

The rural hospitals and health posts in Cuba provide health coverage to areas having a widespread population of 5 000 to 20 000 people and are situated where they are most accessible (which may technically be defined as an urban centre) to the people they serve. Staff, facilities, equipment, and services provided by the rural hospitals are detailed, and health care coverage is illustrated through a description of the predominantly rural region of Escambray. This region encompasses 3 860 km^2 with 209 897 inhabitants, 60% of whom are rural. The region's health network includes: one regional general hospital, six polyclinics, two area hospitals, six rural hospitals, nine rural health posts, one medical post, one maternal care centre, and 29 pharmacies. The number and kind of health services that were provided in 1971 are set forth in simplified and easy-to-read statistics and charts. As of January 1960 newly graduated physicians, dentists, and paramedicals are compelled to practice for a designated period of time in the country's rural areas.

0767 **Cunningham, R.B., Jeffrey, J.C.** *Firestone medical services in Liberia.* Industrial Medicine (Miami), 39(5), May 1970, 23-27. Engl.

The Firestone Plantation Company in Liberia has undertaken to provide its employees and their dependents with medical care. The two rubber plantations, located at Harbel and Cavalla, employ about 15 000 workers. Since the population is widely distributed, a pyramid of services has been established so that the lowest level of skill and facilities that can adequately deal with a particular need will be provided. Prenatal and obstetric service has come to form a large part of the medical work, as women are gradually being persuaded to

adopt Western methods. Thirty-five "divisional health assistants" form the base of the pyramid; they live and work in the villages and are trained to provide basic medical care. Each has a manual of instructions and a list of drugs he is allowed to prescribe. The "regional health centres" form the next layer of the pyramid; they are strategically placed so that no patient is more than 7 miles from a centre. Staffed by experienced graduate nurses, and visited daily by a physician, they take care of normal deliveries, vaccinations, minor surgery, prenatal care and nutritional counseling. Each is provided with an ambulance service. The apex of the pyramid is the Harbel hospital, which includes a school of nursing. The pyramid structure of the service ensures that cases of trivial illness are treated by paramedical staff and do not put a strain on hospital facilities.

0768 **Curwen, M., Brookes, B.** *Health centres: facts and figures.* Lancet (London), 2, 1 Nov 1969, 945-948. Engl.

This article collates unpublished material about health centres in the United Kingdom. The information was gathered from health departments, and the health centres reviewed fall into three categories: those completed and in operation, those being built or having loan sanction, and those having plans approved by the department but not yet having loan sanction. The author points out that there is no machinery to collect, assess, and disseminate information about health centres, and, therefore, new centres do not gain from others' experience in planning, design, and distribution of responsibility. He poses some questions and comments that information profiles, if not formal analysis, should be drawn up for every health centre for health planners' use. Tables show the type of health centre and its operating authority; numbers of general practitioners (GPs) and the use they make of health centres; the distribution of GPs and health centres by standard regions; and distribution by degree of urbanization.

0769 **Das, K.K.** *Rural health.* Journal of the Indian Medical Association (Calcutta), 60, 16 Jan 1973, 60-62. Engl.

The author asserts that the Indian federal government has failed to implement feasible health programmes and has used the medical profession as its scapegoat. The report of the Health Survey and Development Committee (the Bhore report), published in 1946, documented the low level of health care and outlined phased and time-bound strategy and tactics for improvement; the government adopted the principles and initiated 5-year plans to construct health centres, new district and subdivisional hospitals, new medical schools, paramedical training centres, and pharmaceutical industries. However, the rural population still did not receive adequate care, and a reappraisal by the Mudalier committee in 1961 failed to provide solutions to this problem. The author believes that the failure was in implementation not in planning. Health centres were poorly equipped and were understaffed. He says that the Indian Medical Association (IMA) met with the government and repeatedly offered plans to approach health problems such as those in rural health care and family planning but that the government ignored the IMA's suggestions, instituted more plans without scientific investigation, and blamed the failures of previous programmes on the medical profession.

0770 **Davies, A.M.** *Health of Israel: preventive medicine in a developing society.* Preventive Medicine (New York), 1, Mar 1972, 121-140. Engl. 33 refs.

From Israel's re-creation, in 1948, until 1970, massive immigration, lack of medical examinations prior to entry, temporary dwellings for immigrants, social and financial instability, high consanguinity rates, and the presence or threat of war contributed to a milieu of disease. Tuberculosis, dysenteries, malaria, schistosomiasis, hookworm, and other parasitic diseases and zoonoses were common. The present health system has evolved to deal with these problems. It is guided and directed by the Ministry of Health, and comprises 15 districts, each supervised by an officer who oversees and coordinates all public health activities in his area. A health insurance fund, the Kupot Holim established by the Federation of Labour, operates ambulatory services for 2 million persons, and smaller schemes provide for the rest of the population. Although the ambulatory care is widely criticized, it is also widely used: the average Kupot Holim member sees the doctor nine times and obtains 18 prescriptions annually. Curative care on a fee-for-service basis is provided by the highest physician-to-population ratio in the world (1:422). The 7.9% of the national income spent on health covers free clinics and treatment for tuberculosis, free child delivery and immunization programmes, a cash benefit for each child, and 12 weeks paid maternity leave. An excellent reporting system exists whereby each citizen has an identity number; this enables the ministry's Division of Epidemiology to maintain a central file for regular analysis of health service utilization rates. National registers for tuberculosis, mental illness, and cancer, and records of work absenteeism provide additional information sources.

0771 **de Glanville, H.** *Service approach to occupational health in a developing country.* Journal of Tropical Medicine and Hygiene (London), 73, Dec 1970, 347-353. Engl.

The Group Occupational Health Service Association, the first of its kind in Africa, was set up in 1967 in Dar es Salaam, Tanzania, to provide employees of participating firms with better medical attention than was provided by existing public and private services. Since then, 10 of the association's 65 firms have acquired their own dispensaries and staff who are supervised by doctors visiting daily or weekly; the other 55 have been split into contiguous groups of 5-10 factories, each served by a male auxiliary health worker. Each group is visited two to three times weekly by a doctor but patients needing a doctor more urgently are sent to meet him at some other point in his rounds. The association

staff is presently composed of three doctors, 13 auxiliaries (rural medical aides, nurses, and nursing assistants), and five support personnel. The association supervises another 12 health workers in the direct employment of the larger member firms. The author concludes that such a service is likely to be welcomed where public and private services are deficient, but that initial finance, a good programme, and a base of operations such as a university department of community medicine must be provided. He adds that the direct service approach is likely to have a deeper and more rapid influence on occupational health standards than any advisory unit.

0772 **Douglas-Wilson, I., McLachlan, G., ed(s).** *Health service prospects: an international survey.* London, Lancet Ltd., Oct 1973. 346p. Engl.
Individual chapters have been abstracted separately under entries 798 and 845.

Examples of how selected countries around the world are coping with the increased health expectations of their people and the growth of health services are provided in this book. The extremes in organization and ideology are readily apparent, but general trends, e.g., more economical use of resources and increasing state involvement, can be discerned. The chapters, written by nationals of the countries concerned, cover the U.K., France, the German Federal Republic, Sweden, Ghana, Cuba, India, Japan, USSR, China, USA, and the European Economic Community (the founding six).

0773 **Drobny, A.** *Latin American experience related to the solution of rural health problems in the United States.* American Journal of Public Health (New York), 63(1), Jan 1973, 66-70. Engl.

This paper describes the problems of rural health care delivery in Latin America, tentative solutions undertaken by various governments and their relevance to the United States. One problem shared by Latin America and the USA is the shortage in rural areas of medical personnel. Equador, Colombia, and Peru have dealt with this shortage by introducing laws that require newly graduated physicians to serve for 1 year in rural practice. Other successful measures include the use of trained health auxiliaries in Venezuela; mobile health units in Costa Rica; schoolteachers to render first aid and elementary health services in the Amazon areas of Peru; and first-aid posts operated by police in the mountainous areas of Chile. The general trend for all of Latin America is to regionalize rural health care delivery: town institutions, suburban services, and rural health centres form a network of two-way channels between urban centres and rural areas to cover the entire population. The author suggest that this model of regionalized health services should be adopted in the USA (via state health departments or federal grants), comprising the general hospital, smaller intermediate-level hospitals, and health centres staffed by medex personnel (former medics trained as physician assistants) at the local level. Finally, he recommends that community self-help programmes be encouraged through existing institutions.

0774 **Fendall, N.R.** *Maternal and child care and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 63-79. Engl., Fren.
See also entry 1137.

In developing countries only 5-30% of the population at risk receives maternal and child care because these programmes emphasize "intensive individual attention" rather than "minimal services to all." It would be more logical to divide the services into two sections: one concerned with normal obstetrics and the minor childhood illnesses and one concerned with abnormal maternity cases and serious childhood illnesses. The hospitals and physicians would be reserved for the latter, whereas the former would be administered by auxiliaries. These auxiliaries would be trained to detect abnormalities and illnesses in children and pregnant women and to search out and examine as many persons at risk as possible. An additional task for them would be to teach hygiene and health measures in the homes of their patients. Sustained gains in improved health will only come when the home environment is improved, because much disease results from the squalor in which the patients live. Tables of statistical data on maternal and child care in Jamaica, Guatemala, Senegal, Thailand, and Tanzania are included in this paper as well as a suggested syllabus for training MCH auxiliaries.

0775 **Foege, W.H.** Christian Medical Commission, World Council of Churches, Geneva. *Community medicine.* Contact (Geneva), 2, Feb 1970, 1-7. Engl., Fren.
Conference of the Protestant Churches Medical Association, Nairobi, Feb 1970.

The need for a community health approach on the part of African medical missions is discussed. The author points out the positive danger in providing people with a type of medicine that is too costly and does not get to the heart of the problem. Examples of a community approach to medicine, taken from government programmes for smallpox eradication and measles immunization, and steps toward establishing community medicine in mission hospitals are outlined. These include: taking a case history of the community; doing a physical examination, not only of the people, but also of the resources and environmental conditions present in the community; deciding what laboratory analyses are required; setting up a surveillance system to provide feedback on births, deaths, disease, and malnutrition incidence, etc.; cooperating with governmental and other project efforts; and setting up a system of periodic evaluation. Further general practical suggestions concerning nutrition, tuberculosis, education, etc., are given.

0776 **Garcia, P.J.** *Rural health unit program of the Department of Health.* Newsette (Manila), 8(1), Jan-Mar 1968, 3-21. Engl. 17 refs.

Appeared also in Philippine Journal of Nursing (Manila), 37(1), Jan-Mar 1968, 7-23.

Rural (or barrio) dwellers represent 75-85% of the population of the Philippines. They are presently served by 1 435 government-operated rural health units staffed by 7 281 personnel. The Rural Health Unit (RHU) project was formulated to better the lot of the "tao" or common man of the barrios, who, prior to its instigation, received little or no medical attention. The first 81 units were established in 1953. Each was staffed by a health team consisting of physician, nurse, midwife, and sanitary inspector. During the implementation of the project, isolated barrios were supplied with "barrio medical kits"; these were boxes of drugs and remedies that could be administered by the barrio health committee members during emergencies. Barrio health centres, serviced by visits from the health team, were set up as subcentres to the RHUs; the communities were asked to provide a building for the centre to generate local enthusiasm. RHUs are distributed such that each member of the health team is able to visit the whole territory for which he is responsible within 1 or 2 months. The approach is comprehensive: the RHU cooperates with local officials, civic organizations, private practitioners, and puericulture (maternal and child health) centres in problem-solving. The organization and statutory bases of the RHU project are detailed; statistical data on population numbers per unit and per staff member are presented; a history of medical services in the Philippines is sketched; and achievements to date and problems yet to be solved are outlined.

0777 **Gonzalez, C.L.** *Atencion medica de la poblacion dispersa: experiencia de Venezuela. (Medical care of scattered populations: Venezuela's experience).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 64, Feb 1968, 93-102. Span.

Most of the censuses taken in recent years in Latin American countries indicate that in 11 of the 18 countries studied, more than 50% of the population live in rural areas. It may therefore be construed that most of the population is scattered, since it lives in small, isolated villages. The problem of providing the population with medical care is overwhelming not only because of its constantly increasing numbers but also because of the irregular geographical distribution of physicians. Venezuela has been greatly concerned over the fate of its scattered rural population, especially in view of the fact that, in 1965, 46.6% of the country's physicians were practicing in Caracas, which comprises only 14.6% of the total population. The II Venezuelan Congress of Public Health (1961), the Venezuelan Society of Public Health (1962), and the Medical Federation of Venezuela (1961 and 1962) studied the extent of this problem and estimated that only one-third of the 3.5 million persons affected had access to medical services. The three bodies, therefore, attempted to implement some type of medical care that would be in keeping with the environment of the scattered populations. To that end, they proposed a programme of health penetration, consisting of a redirection of the activities of rural dispensaries, so that certain minimum, well-defined preventive and curative services would be offered to precede the rural medical officer. It was known as the programme of "simplified medicine." It was proposed that the programme should be incorporated into the health organization of Venezuela, and should adhere to its standards (single command, regionalization, districts, integrated services, constant supervision, periodic evaluation, and personnel training). The plan was favourably received by the Medical Federation of Venezuela, and by late 1966 the programme of simplified medicine was being applied in seven areas of Venezuela. As part of the project, training was given to 269 nursing auxiliaries, 196 of whom were already in their posts by late 1966. Among the activities of the dispensaries were recording of births, first aid, various kinds of vaccination, home visits, educational talks, and the taking of samples for tests. By now the programme is technically and administratively consolidated in the areas where it was applied and is receiving the vivid interest of participating personnel at all levels and the cooperation of voluntary personnel. Thus it is well on the way to reaching the objectives for which it was established. (Revised journal abstract.)

0778 **Gupta, R.C.** *Accident problem in comprehensive health care.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 140-141. Engl.

The accident is an emerging health care problem, and deaths due to accidents are increasing throughout the world, even in rural areas. With special reference to India, this paper briefly discusses different types of accident: home, industrial, aircraft, suicidal, and road (India has one of the highest road accident rates in the world), and outlines some human and environmental causative factors. Prevention measures, including safety education in schools and factories, can reduce the incidence and severity of accidents. Other important measures would be a rehabilitation scheme and an emergency care system that would include a casualty service at local health centres.

0779 **Gyi, K.** *Health services in the first decade.* Forward (Rangoon), 10(14), 1 Mar 1972, 16-19. Engl.

Progressive development of health services in Burma is reflected in the 121% increase in the health budget for 1969-70 over the budget for 1961-62. Training programmes have been expanded for doctors, dentists, paramedical staff, nurses, midwives, and health assistants. Health assistants, who perform simple curative measures and a wide range of preventive services in rural areas, receive 2 years academic training plus 3 months in the field. There are also courses for "lady health visitors" and those interested in public health nursing; training is extended to indigenous midwives to help improve maternal care in rural areas. Although postgraduate training has also been increased and hospitals now provide better curative facilities, the main priorities of the national health policy are preventive measures, control of communicable diseases, and community-oriented health programmes. The objectives of

the reorganized health service are: (1) to provide comprehensive medical care to peasants who reside in rural areas and constitute 85% of the population; (2) to ensure a uniform improvement in the health status of the whole country; (3) to integrate the curative and preventive services; (4) to unify allied sections of the health services and eliminate duplication; and (5) to decentralize health administration by delegation of authority to the divisional and township levels. At the peripheral level, public health services comprise mother and child health care, school health services, and an expanding network of rural health centres. These centres are managed by a health assistant (responsible to the local township medical officer), aided by a "lady health visitor," four or five midwives, and a vaccinator.

0780 **Hammamy, M.T.** Egypt, Ministry of Health. *Post and responsibilities of director of rural health centres; national policy and programmes of rural development training centres; and national policy and programmes of training personnel for rural development.* Cairo, Ministry of Health, Apr 1973. 5p. Engl.
Unpublished document.

The duties and responsibilities of the Director of Rural Health Centres, Ministry of Health, Cairo, Egypt, are described. The director is in charge of the administration of both the health centres and rural health units. Integrated services of a basic nature are offered in health education, sanitation, maternal and child health care and family planning, school health services, and preventive and curative medicine. Each centre has an inpatient facility of about 20 beds. The administrator is in charge of policymaking and planning. Statistical disease surveillance, technical advice, coordination with other services, designing field studies for problem-solving, and manpower planning and training are all part of the director's functions. Local training centres are set up by local governments. The Egyptian national rural health policy and various programmes of rural development training centres are outlined.

0781 **Hammamy, M.T.** Egypt, Ministry of Health. *Rural health services in U.A.R.* Cairo, Ministry of Health, 1973. 4p. Engl.
Unpublished document.

The rural sector of Egypt includes 4 200 villages constituting 60% of the population. The first national rural health plan, started in 1942, involved the establishment of a health centre for every 15 000-20 000 persons. By 1962, awareness of the need for greater emphasis on preventive and public health was reflected in the decision to create smaller units, each serving 5 000 persons. To meet this objective, 2 500 rural health units were required. For every three health units, a "referral mother centre" was to be established. Some planning changes have taken place since then, including the involvement of village people in the projects, and the provision of 50% of centre funds by local governments. Specialist visits are scheduled at regular intervals to augment the services offered by these small units. A rural health care delivery organizational chart and an outline of the categories and numbers of health workers for each rural health centre and unit are included in the paper.

0782 **Horwitz, A.** *Una vision de las condiciones de salud en las Americas. (Public health conditions in the Americas).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 66, Jun 1969, 549-551. Span.
Editorial.

This editorial concerning public health in Latin America over a 10-year period (1961-70) discusses the progress that has been made and where this progress has fallen short of expectations. Although the individual's right to health care has been generally recognized, the rural sector, which is expected to harbour 150 million people by the end of the century, remains neglected. About 57% of the people living in communities of fewer than 10 000 lack access to even the most basic forms of health care. Some progress has been made: of the 60 million people in malaria-exposed areas, 58 million now benefit from successful preventive programmes; deaths attributed to tuberculosis have declined by two-thirds; child mortality has been reduced by 12% for children under a year old and by 20% for children between the ages of 1 and 4 years; epidemic diseases have disappeared, and endemic diseases are on the wane; and the ratio of health professionals per head of population has increased. Nevertheless, it would still seem that the application of knowledge and technology to these problems has been slow in coming about. Modern methods and administrative practices must be brought to bear in making new medical technology available to all. Furthermore, countries must look to international organizations as complements to, not as replacements for, their own health efforts.

0783 **Jara, J.B.** Chile, National Health Service. *Plan de organizacion de la comunidades Mapuches de la provincias Malleco y Cautin (Chile). (Organization plan for the Mapuche Indian communities of Malleco and Cautin Provinces, Chile).* Temuco, Chile, Zone 10, National Health Service, Apr 1965. 1v.(various pagings). Span.
Unpublished document. See also entry 1049.

The Mapuche Indians represent about 20% of the population in the Malleco and Cautin provinces of Chile. They live in small communities called reductions, which are population groupings generally held together by family ties. They derive their subsistance from primitive farming methods. As a result of their social isolation, they live with high infant mortality, typhoid, alcoholism, and high morbidity due to tuberculosis. A "Mapuche Pilot Unit" has been established on Huapi Island (Health Zone No. 11) in Cautin Province, where there are 2000 Mapuche inhabitants. Action Plan No. 1 of the pilot unit calls for curative and preventive health and dental care and lists the materials and equipment required for the implementation of the plan. Action

Plan No. 2 seeks to accomplish community organization, minimum general education, basic sanitary education, modern farming methods, and basic sanitation. The required materials and equipment are listed. Action Plan No. 3 seeks to develop an intensive agricultural production, suitable housing, clothing, roads, and transportation. The paper lists the minimum health manpower (professional) and equipment required, plus the materials needed in one rural health centre manned by a physician.

0784 **Jolly, R., King, M.** *Organization of health services.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.2. 24p. Engl.
See also entry 785.

Distance, population density, finance, and staff are the four main determinants of medical care, particularly in rural areas. Each community should ideally possess its own health worker, but in the absence of this, the most effective and economical care will be provided by mobile services allied to a network of health centres. An efficient outpatient service at the periphery will then allow inpatient care to be concentrated in fewer, large efficient hospitals. Statistical data on hospital attendance, comparative costings for different types of health care delivery, and some practical notes on operation of the mobile clinics are presented.

0785 **King, M., ed(s).** *Medical care in developing countries.* Nairobi, Oxford University Press, 1966. 1v.(various pagings). Engl.
Individual articles have been abstracted separately under entries 784, 942, 966, 976, 977, 993, 1041, 1051, 1163, and 1359.

This book is subtitled "A Primer on the Medicine of Poverty and a Symposium from Makerere." Its 30 chapters contain practical advice on diverse aspects of medical care directly applicable to developing countries, e.g., organization of health services, the health centre, health education, the auxiliary, architecture of hospitals and health centres, teaching and tending aids, etc. There are several references, a bibliography, and various appendices of supplementary information.

0786 **Martin, L.J.** WHO, Brazzaville. *Health education services.* In An Integrated Concept of the Public Health Services in the African Region, Brazzaville, WHO AFRO Technical Papers No.2, 1970, 47-51. Engl.

Every health-related act comprises three elements: the preventive, the curative, and the educative. Proportions of each element vary – although a surgical procedure is primarily preventive or curative, its success may depend on the patient's knowing why the procedure was necessary, what precipitated it, and what activities might undo the cure. Every health worker, then, should be a health educator, and his training must prepare him for that role. To this end it is recommended that a health education service be set up at the ministry level, administered by a professional who has the equivalent of a master's degree in public health and has specialized in health education. He will ensure (1) that training prepares health staff for their educative tasks; (2) that planning for education is incorporated in plans for health campaigns; (3) that extragovernmental agencies provide health education within their health services; (4) that visual aids are pretested and continually reevaluated; (5) that health education is based on applied studies and research into a population's education, beliefs, habits, culture, etc.; and (6) that expert educational advice is available in emergencies.

0787 **Massani, M.** *Public health services in Cuba.* Panminerva Medica (Torino), 10, Jan-Feb 1968, 54-58. Engl.

A short account of the state of Cuba's public health services at the time of the revolution (1958) is presented, and attention is drawn to the extreme neglect of rural areas that characterized this period. The provisions of the Social Security Law No. 1100 (1963) are listed and are followed by a discussion of the powers and functions of the Ministry of Health and its subordinate departments and dependent bodies. Details of the present public health service network are given, and special reference is made to the hospital service and to the meetings of various committees and boards engaged in the supervision of hospital organization and management. In conclusion, a brief account is given of preventive medicine, public hygiene, and public health finance under the present system. (Modified author abstract.)

0788 **McCormick, G., ed(s).** Canadian University Service Overseas, Ottawa. *CUSO readings in health.* Ottawa, Canadian University Service Overseas, n.d. 356p. Engl.
Individual articles have been abstracted separately under entries 923, 946, 947, 990, and 1099.

This compilation of reports, essays, and newspaper clippings deals with the health situation in the developing countries in which the Canadian University Service Overseas (CUSO) operates. The material is organized into the following sections: philosophies of development in health care; nutrition; maternal and child health; family planning and population control; education and training; projects; volunteer programmes; area specialties; and miscellaneous. As well as presenting a general picture of health conditions in developing countries, the book provides additional information on specific geographic areas and is a useful guide for both prospective volunteers and those wishing to increase their knowledge of the Third World.

0789 **McCreadie, D.W.** *Growth and development of the Kuwait health service.* Journal of Tropical Medicine and Hygiene (London), 66, Jun 1963, 137-151. Engl.

The evolution of health services in Kuwait has been strongly influenced by the oil industry. At the beginning of this century, the only medical services were provided by doctors visiting the British diplomatic corps and by medical missions. With the introduction of oil exploration (1935), the oil companies provided Western-style health facilities for their own employees, and

at this time an embryo government medical service began to materialize. The 1950s and '60s witnessed enormous reorganization and expansion of services paralleled by increases in the numbers of qualified medical staff and in the training programmes for local auxiliary health workers. Statistics for the period 1949-63 illustrate the improvements in private and government medical services, numbers of hospital beds available, and numbers of the different categories of qualified staff. The latest developments include an expanded public health service, increased health education, a school medical service, more local health units, and more Kuwaitis within the health service.

0790 McGilvray, J.C., Simmons, G. *Review of health services in Botswana with particular reference to mission medical services.* Geneva, Christian Medical Commission, 1972. 44p. Engl.
See also entry 1173.

The Christian Medical Commission was invited to review the present and projected health services in Botswana to suggest the most relevant role for church-related medical institutions. The CMC appointed surveyors to undertake the review, and they found that mission medical services, due to inflation and certain government policies, would eventually be forced to integrate with government services in order to survive. This would require major administrative adjustments for which no provision was immediately available; indeed, the institutes examined seemed to have little understanding of sound administrative practices or health economics. It was recommended that the missions establish a central administration among themselves to accomplish the following: (1) develop a mechanism for joint planning with government; (2) adopt a uniform accounting system and uniform method of statistical reporting; (3) establish priorities among requests to external agencies, making sure these requests are consistent with joint planning (government and institutes); (4) study the feasibility of central purchasing of drugs and supplies; (5) study the feasibility of interchanging personnel to cover furloughs and improve the quality of training programmes; and (6) coordinate the responsibility for the supervision of clinics. Detailed descriptions (with statistical data) of the various church-related medical institutions are provided, and the syllabus for the family welfare educators' course is summarized. A scheme for training medical auxiliaries is appended and has been abstracted separately.

0791 Monnerot-Dumaine. *L'equipement sanitaire des Etats africains d'expression francaise: Cote d'Ivoire. (Health facilities in francophone Africa: Ivory Coast).* La Presse Medicale (Paris), 74(9), 19 Feb 1966, 485-486. Fren.

The health infrastructure, medical facilities, and medical manpower of the Ivory Coast are briefly described, and the health profile of the country is sketched. Serving a population of 3.6 million are 189 doctors, three surgeon-dentists, 96 midwives, 1 182 nurses (male), 419 nurses (female), one medical school, one leprosy institution, and 7 445 hospital beds. The hot humid climate is conducive to the spread of "les grandes endémies" of which leprosy ranks foremost with over 110 000 victims. Syphilis is under control thanks to penicillin; the prevalence of tuberculosis has recently been recognized, and mobile clinics are now screening for the disease and giving BCG vaccinations. Trypanosomiasis is disappearing, and since 1964, universal vaccination against smallpox has been implemented. However, those diseases that do not lend themselves to treatment via mass campaigns (e.g., malaria, bilharzia, trachoma, and intestinal parasites) continue to be a problem.

0792 Narain, B. *Rural health services in independent India.* Indian Journal of Public Health (Calcutta), 16(4), Oct 1972, 151-155. Engl.

Few health services offering comprehensive care existed in rural India prior to World War II. However, the rural hygiene conferences organized in the 1930s by the League of Nations did generate isolated attempts at introducing medical care. The conferences stressed the need for a comprehensive health survey as a basis for health services planning and local health centres as a means for promoting health and welfare in rural areas. These two ideas were later incorporated into the comprehensive national plan that emerged after India achieved independence. A network of health centres, subcentres, and district hospitals has now been established in each rural development block and has achieved considerable success, especially in the control of communicable diseases and in family planning – stabilization of the population is a major objective. Statistical data on life expectancy and birth and death rates confirm the effectiveness of the health programme, but even greater efforts should be applied in two particular fields: sanitation and health education.

0793 Narain, B. *Comprehensive health care essential requirements and scope of nationalisation.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 116-119. Engl.

This paper outlines the objectives and scope of India's comprehensive health service. It's major components are: (1) promotion of health (e.g., nutrition, sanitation, environmental health); (2) prevention of disease (especially immunization and health education); (3) early diagnosis and treatment (to control the spread of communicable disease, reduce the risk of complications, and shorten the period of disability); and (4) rehabilitation. Within this general framework there are specific problems that must be dealt with, notably the population crisis. Special consideration must be given to certain groups, including mothers and children, the aged, industrial workers, tribal people, and the inhabitants of rural areas; for this reason primary health centres with subcentres and referral hospitals are being established all over India. Traditional methods of medical education need major revision to make undergraduate training more relevant to the community. New hazards from industrialization are emerging and need to be monitored, and there must be an efficient system for collection and analysis of vital statistics, a valuable

planning tool. With the introduction of a limited government-operated health insurance scheme, greater availability of free medical treatment, and the more active role of central and state governments in special health programmes, the foundations of a nationalized comprehensive health service already exist.

0794 **Navarro, V.** *Health services in Cuba: an initial appraisal.* New England Journal of Medicine (Boston), 287(19), 9 Nov 1972, 954-959. Engl.

The development of the Cuban health services during the last decade reflects a commitment to minimize the striking inequalities in the availability and consumption of health resources that previously existed between social classes, between cities and rural areas, and between regions. This process of equalization has been characterized by a centralization of inpatient services, a decentralization of ambulatory services, and an increase in the use and production of paramedical and auxiliary personnel within the health services system. The health services today are structured according to regional models aimed at providing integrated care to the whole population, with integration of preventive with curative services, social with medical services, and environmental with personal health services. The universal coverage of the population has been achieved by redistribution of old and new resources and a heavy investment in the health sector, with great priority given to the rural and poor areas and regions of the country and to the production of personnel, primarily of physicians. (Journal abstract.)

0795 **Nugroho, G.** *Research study on a community health service in the district of Sumberlawang, an arid and poor area in Central Java.* Solo, Indonesia, n.p., n.d., 4p. Engl.

Unpublished document; courtesy of Dr. G. Nugroho, Prosperous Indonesia Foundation, Jl. Slamet Riyadi 309.

A study was undertaken to determine the health care needs of the district of Sumberlawang, Central Java, Indonesia, so that a suitable system of health care delivery could be devised for it. The findings revealed that because of poor quality soil (and particularly its inability to retain water) food production meets only 4-6 months of the people's annual needs. Cassava, corn, and rice are the diet staples; fruit, meat, and eggs are practically unknown. All children under 5 years of age could be classed as borderline malnutrition cases. A comprehensive system was devised to include curative, preventive, and educative measures, and family planning. Care was provided through a health centre in the town of Sumberlawang; it included a maternity clinic, an outpatient clinic, and a rehabilitation centre for malnourished children. Preventive care was provided through home visits and monthly under-fives' clinics conducted in the district's villages by a midwife, a social worker, and an assistant. Milk and protein supplements were distributed. An evaluation survey (carried out after the implementation of these measures) revealed that the nutritional and health status of the children in the area had improved, not so much a result of milk and protein distribution as of increased awareness on the part of the mothers. The cost per child of the programme has been calculated. The importance of preparing the community in advance and the advantages of tapping local potential for capital and labour are pointed out.

0796 **Pene, P.** *Sante publique et les personnels de sante en URSS. (Public health and health personnel in the USSR).* Marseille Medical (Marseille), 109(12), 1972, 853-861. Fren.

The public health system and health personnel in the USSR as perceived by a visitor from France are discussed under the following headings: general considerations (background briefing); general characteristics of the public health system; the health professions (types and numbers of personnel in each are tabulated); health institutions (physical description, types, and numbers); health services organization in rural and urban areas; and education of health personnel. The author remarks that, although such a highly centralized, organized, and socialized form of medicine would not be feasible in his own country, it has succeeded in providing the population of the USSR with preventive and curative coverage.

0797 **Saha, A.L.** *Perspective of basic health services in India.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 144. Engl.

As suggested by WHO and UNICEF, "basic health service" is a network of coordinated peripheral and intermediate health units with a central administration; it performs a selected group of functions essential to the health of an area and assures the availability of competent professional and auxiliary personnel. In India, these functions were conceived in terms of comprehensive health care programmes in the rural areas (at health centre and subcentre levels) that would incorporate child health, control of communicable diseases, environmental sanitation, maintenance of records, health education, and medical care. Although a particular category of auxiliary health worker has been designated "basic health worker," almost all categories of staff at every level must participate in the functions allotted to the basic health service. Another important consideration is the need to integrate mass campaigns into the service, particularly at the peripheral level.

0798 **Sai, F.T.** *Ghana.* In Douglas-Wilson, I., McLachlan, G., eds., Health Service Prospects: an International Survey, London, Lancet Ltd., Oct 1973, 125-155. Engl.

See also entry 772.

Ghana's health services have been based to a large extent on the British system, with emphasis on hospitals and sophisticated techniques. But these are costly and benefit only the city dweller, neglecting 70-80% of the population inhabiting rural areas. Although the value of promotive/protective health care has been recognized for several years, its benefits are not readily visible; hence these less expensive, more effective health programmes (prenatal care, immunization, nutrition,

environmental sanitation, health education, etc.) succumb to political pressure. The few skilled doctors cannot provide the care needed by the rural areas; an "army," trained in very simple techniques, must be dispersed among the population to perform specific tasks: elementary medical care, MCH, collection of health statistics, environmental health. However, development of Ghana's health services is being delayed because there is an absence of medical leadership; there is no experienced health planning unit; its medical education needs reorientation; and there is a shortage of health support staff. This survey describes the nature and extent of the health problems in Ghana, the organization and distribution of health services, the training and utilization of health personnel, the administration of the health budget, and the goals and limitations of the health service.

0799 **Schram, R.** *History of the Nigerian health services.* Ibadan, Ibadan University Press, 1971. 480p. Engl.

The growth of Nigeria's medical and health services over a period of 500 years (1460 to 1960, the year of national independence) is traced. Subjects discussed include: early exploration; missionaries and medical missions; endemic and epidemic diseases; specific campaigns; foreign and international aid (WHO, UNICEF); and rural and public health care prior to 1960. One fact of particular interest is the contribution of Africans themselves to the growth of scientific medical care in Nigeria, as well as other West African countries. More than 650 references are listed.

0800 **Schwefel, D., Breuer, B.** Deutsches Institut Fur Entwicklungspolitik, Berlin. Deutsche Stiftung Fur Entwicklungslander, Berlin. *Organisation dezentralisierter gesundheitsdienste in Latinamerika. (Organization of decentralized health services in Latin America).* Berlin, Deutsches Institut Fur Entwicklungspolitik and Deutsche Stiftung Fur Entwicklungslander, 1973. 116p. German. 217 refs.

In a detailed review of the organization of the decentralized public health services in Latin America, the following aspects are discussed: planning, administration, and organization of public health services; roots and methods of public health planning; decentralized public health systems; regionalized systems; and models of decentralized services; marginal conditions for decentralization and democratization of services; "participacion popular" in public health services; elements of an integrated public health policy; functional interrelationships between public health and nutrition; food programmes and structured public health programmes; coordination between public health and food programme policies; and an integrated public health policy. A recent history of public health services in the Latin American countries and the special aspects of their development are outlined. The different types of public health administrative systems and international cooperative efforts are examined. The development of local units geared to specific local health needs is regarded as essential for solving existing public health problems in Latin America.

0801 **Sibley, J.R.** Christian Medical Commission, World Council of Churches, Geneva. *Community health - progress and problems: Kojedo project (Korea).* In Christian Medical Commission, Annual Meeting 1971, Geneva, Christian Medical Commission, 1971, 11-22. Engl.

See entry 839 for complete proceedings. Appeared also in Contact (Geneva), Occasional Paper No. 5, Oct 1971, 1-12.

The Island of Koje Do, South Korea, was chosen as the site for a project to study the effectiveness of a broad-based, community-centred health programme, consisting of family planning, public health, and some curative services. The Koje Do project, sponsored by the Christian Medical Commission, was to be carried out in cooperation with, and along the lines of, the Korean government's plans. Major capital investment in the project was to be avoided; the programme was to be adapted to community resources, such that self-support would become a feasible objective. The church congregation was to be involved as a motivating force at the village level. During its 3 years of operation, the project has gone through a number of development stages. Four of these stages are described: recognition of the inadequacies of institutionalized medicine; response in the form of reeducation (the physician must learn to think in terms of new methods, not just minor modifications to the old); trial and tribulation, resulting from the physician's traditional education, the diversity of demands made upon him, his incomplete understanding of the new task, and his lack of experience in the local situation; and denouement, the point at which the project takes shape. Some examples of problems encountered as a result of mistaken assumptions are outlined for the benefit of future project developers. The author concludes that, because of these problems, the scope of the project should be limited and that more emphasis should be put on education. A list of the project's accomplishments is included.

0802 **Stewart, M.M.** *Toward better health; who really cares?* Journal of the Medical Association of Thailand (Bangkok), 56(4), Apr 1973, 217-219. Engl.

Editorial.

The problem with health care is not how to guarantee good health for all citizens but how much a society is willing to invest in health protection and how this investment can be used most efficiently to improve the health status of the population as a whole. The issues involve government, health professions, medical schools and other training centres, hospitals, health centres, clinics, pharmacies, and most important, the individual citizens who are the ultimate consumers of health care services. Together, the groups involved must examine the present system and resolve three fundamental issues: allocation of resources to health care; optimal use of these resources by proper design of the

system; and greater sharing of the responsibility and decision-making with the community.

0803 **Thein, S.** *Health seminar at the foot of Mandalay Hill.* Forward (Rangoon), 10(11), 15 Jan 1972, 18-21. Engl.

The recurring theme in this brief report on the Burma Health Department Seminar is the need for better distribution of health care between the rich and the poor and between the urban and rural populations. In the first discussion (curative medicine) it is stated that rare medicines presently restricted to hospitals should be distributed via "shops" and thereby made more readily available to the attendants of patients outside the hospital. Also, there should be decentralization of medical refresher courses so that doctors working in remote regions would also be able to benefit from them. In the second discussion (preventive medicine) emphasis is placed on the duty of every health worker to participate in the health education of the community. The third discussion (integration of services) underscores the need to train the members of health service units in field work before assigning them specific duties. And in the final discussion (management and administration), it is noted that transfer of health employees to remote areas as punitive action does not reform them but leads to demoralization and graver consequences; instead, participants agreed that such employees should be kept near superiors and given additional guidance.

0804 **Tinembart, A.M.** *Organisation des services de sante au Nepal. (Organization of health services in Nepal).* Zeitschrift fuer Krankenpflege (Bern), 66(4), Apr 1973, 147-152. Fren.

The public health services of Nepal are described very generally, with reference to such aspects as hospital services, missions, psychiatric services, training of medical and paramedical personnel, principal illnesses encountered, and maternal and child health. There is some discussion on the role of the public health nurse in Nepal.

0805 **Universidad del Valle, Division de Salud, Cali, Colombia.** *Research program in health service delivery models (PRIMOPS). Document No.1: design of the model.* Cali, Colombia, Universidad del Valle, Division de Salud, 1973. ~2p. Engl. 21 refs.

Unpublished document. Translation of: Diseno del Modelo, Cali, Programa de Investigacion de Modelos de Prestacion de Servicios de Salud (PRIMOPS), 1973.

Analysis shows maternal and child health coverage in Colombia to be inadequate, mainly due to the lack of resources and techniques. To remedy the situation, a two-phase project has been proposed by the Universidad del Valle, Cali. The first phase, "Research Program in Health Service Delivery Models," aims at raising protection levels through a new health care delivery system. The second phase, "Interinstitutional Integration Program for Training in the Delivery of Health Services," aims at integrating health training and health care delivery systems. A 3-year experiment in the urban area of Candelaria served as a model for the proposed health system. Project I is described here according to operational methodology (site selection, division into sectors, establishment of standards for the various subprogrammes, etc.), functional organization of the system (physician, nurse, nursing auxiliary, health promoter, midwife, health card, health record), evaluation criteria, and administrative organization.

0806 **Venezuela, Ministry of Health and Social Welfare.** *Programa de medicina simplificada en Venezuela. (Simplified medical care programme for Venezuela).* Caracas, Ministry of Health and Social Welfare, n.d. 4p. Span.

Unpublished document.

In Venezuela, 21.6% of the total population lives in rural communities. The existing 500 rural health centres do not provide adequate health coverage particularly to those in communities of fewer than 500. In view of the difficulty in providing permanent health care services, the Ministry of Public Health organized a programme of simplified medicine, whose core is the rural health post. This facility provides minimum services through auxiliary health workers who are permanently supervised and supported by a professional service. The theoretical and practical aspects of the auxiliary health worker's training are detailed. These include administrative and preventive functions. Auxiliary training is given by professional nurses, each of whom trains 12 students. Since 1962, 12 states have benefited from the programme and 651 auxiliaries have been trained. In 1972, there were 274 rural dispensaries serving 230 883 rural inhabitants, an average of 843 persons per auxiliary health worker. This programme of simplified medicine has succeeded in providing scattered rural communities with greater coverage, by offering minimum health care services in a permanent manner.

0807 **Vysohlid, J.** WHO, Brazzaville. *Development of health services in the African Region: a short historical review.* In An Integrated Concept of the Public Health Services in the African Region, Brazzaville, WHO AFRO Technical Papers No.2, 1970, 13-27. Engl.

This paper traces the history of health services in the African region; it discusses present problems in the context of past developments, starting with traditional African medicine, through the introduction of European medicine via missionaries and military contingents, up to the present. At the beginning of the 20th century, African legislation on hygiene followed closely that in Europe, but as the lawmakers and health personnel were non-African, inroads were few. From 1920 to 1950, emphasis shifted to control of epidemic and endemic diseases and to recruiting health personnel from native populations, but World War II and the depression, the gap between the expectations and resources of the newly independent nations, lack of sickness insurance in social security schemes, and the increase in population blocked progress. Because the health services were not developed for and by the Africans themselves, national health personnel have only

recently begun to acquire experience and proper training. Finally, the numbers of paramedicals and professionals have not appreciably increased because non-Africans have steadily left Africa and Africans who study outside often do not return. Those who do return are frustrated by their training, which does not prepare them for their responsibilities. This paper does not pretend to be comprehensive, but it has drawn from 28 published documents, which are referenced.

0808 **Wad, V.G.** *Health problems of developing countries: with particular reference to Ethiopia.* Journal of the Royal Institute of Public Health and Hygiene (London), 29, Nov-Dec 1966, 193-208. Engl. 26 refs.

Plans to alleviate Ethiopia's health problems – mostly preventable diseases – take into account the grossly inadequate number of doctors and the widespread scattering of the population; however, they do not explore the potential of community involvement. The Public Health College and Training Centre, established in 1954, trains five categories of auxiliary health workers: community health officer, community nurse, community sanitarian, laboratory technician, and dresser. They are distributed throughout an expanding network of rural health centres, but this distribution still does not provide a solution to the underlying problems. Instead, it is vital to encourage widespread community involvement in health education by enlisting the help of churches, schools, the media, tribe leaders, etc. The schoolteacher trained in health education is particularly influential in shaping the future of the community. Also there should be greater emphasis on vaccination programmes, hygiene instruction, MCH care, nutritional advice, attention to water supply and sewage disposal, and the removal of harmful local taboos and traditions.

0809 **Wahi, P.N.** *Organization, management, and progress of medical research.* Indian Journal of Public Administration (New Delhi), 15, Jul-Sep 1969, 385-394. Engl.

This review traces the development of medical research in India starting with the creation in 1911 of the Indian Research Fund Association (IRFA), the country's first organization to promote and coordinate research. Although IRFA enabled several research institutes to become established, the Bhore Committee (1946) on medical and health services noted inefficiencies in the utilization of personnel and facilities and recommended: (1) establishment of a centre for postgraduate training and research; (2) setting up of special institutes for research into specific diseases; and (3) creation of a statutory body for the purpose of formulating policies for development of medical research in universities, and selection and training of research workers. Consequently, the Indian Council of Medical Research was established in 1949 to support and coordinate the bulk of the country's medical research. This review outlines its organization and activities, which include the maintenance of several major research institutions; formation of "expert groups" (e.g., research into medical education); organization of conferences and workshops; provision of fellowships; and the undertaking of several epidemiological studies. There is a brief discussion of progress made in the fields of communicable diseases, malnutrition, reproductive biology, pharmaceuticals, and clinical research, and a note on the vital role played by ancillary and support services for dissemination of knowledge, such as good scientific publications, professional societies, libraries, and other information centres.

0810 **Werner, E.** *Der organisatorische aufbau des gesundheitswesens in der Republik Kuba. (Organizational structure of public health in the Republic of Cuba).* Das Deutsche Gesundheitswesen (Berlin), 48, Nov 1969, 2292-2295. German.

The organization and structure of the socialist health system in the Republic of Cuba are described. Examples are provided to demonstrate its functioning. By 1969, the public health system had been in operation for 11 years and was already serving as a model for other countries.

0811 **WHO, Geneva.** *Organization of local and intermediate health administrations: report of a WHO expert committee.* Geneva, WHO Technical Report Series No.499, 1972. 26p. Engl.

The main objective of the WHO Expert Committee on the Organization of Local and Intermediate Health Administrations was to give guidance to authorities building or about to build health administrations at the regional, local, and intermediate levels. The objectives and functions of health administrations are defined according to generally used criteria, and the concept of regionalization is discussed. It is defined as the setting up of community health services in harmony with the economic, social, and cultural life of the region, and seen as a possible substitute for the historical development of services. Regionalization can take several forms, some of which are briefly covered in this report.

0812 **WHO, Geneva.** *Health services in the USSR: report prepared by the participants in a study tour organized by the World Health Organization.* Geneva, WHO Public Health Papers No.3, 1960. 60p. Engl.

See also entry 962.

After they returned from a 5-week tour, participants from 21 countries and territories prepared this outline of the underlying concepts and organization of the USSR health services. The underlying concepts are: (1) integration of curative and preventive medicine; (2) special care for certain groups such as mothers, children, and industrial workers; and (3) availability of large numbers of specialists in all services. The structure has six major elements: the directing, planning, and supervising element comprises the Central Ministry of

Health and health ministries of the 15 constituent republics: the academic and scientific element is composed of the Academy of Medical Sciences and smaller scientific institutions: the advisory is made up of scientific councils and rural health departments: the educational element, administered by the central ministry, comprises medical schools and institutes of postgraduate education: the executive element is health departments at city, oblast, and krai levels: and the operational element is a system of regional or district health units based on a regional or district hospital. Special programmes for maternal and child health as well as occupational health are outlined: environmental sanitation is briefly discussed: and sanatoria, rest homes, and health resorts, which enjoy popularity in the USSR, are described. Finally, the authors trace the medical education and paramedical training available in the Soviet Union, and comment that health education is considered an integral part of all training and care. Appendices include diagrams of the structure of health services and varied components.

0813 **Williams, C.D.** *Social medicine in developing countries.* Lancet (London). 2. 26 Apr 1958. 863-866; 3 May 1958. 919-922. Engl.

In this paper, the author discusses social medicine as it is applied in developing countries, pointing out its deficiencies and shortcomings in meeting the needs of these populations and suggesting some alternative approaches. The outdated view that specific diseases can be cured by the application of specific techniques has resulted in disease treatment rather than treatment of the human being as a whole and the family as a unit. Too great a reliance on statistics has resulted in the focusing of effort on the epidemics and endemic diseases of adulthood while the causes of loss of life in childhood are overlooked. A fragmented "specialist" approach to disease has precluded a perception of illness within the context of the community, i.e., a "total" health picture. It is suggested that the area where medical attention is most needed, and in which it will have the most far-reaching effect, is that of maternal and child health. It is recommended that more attention be paid to pediatrics in medical schools where physicians are being trained for work in developing countries.

0814 **Wood-Ritsatakis, A.** *Analysis of the health and welfare services in Greece.* Athens, Center of Planning and Economic Research. 1970. 227p. Engl.

With regard to rural health care delivery, Greece has many characteristics in common with developing countries. Foremost among them is the distribution of health manpower, since medical graduates are generally loathe to practice in rural villages. A severe shortage of nurses – only 20% of whom were fully qualified at the time this book was written – hampers the staffing of facilities. This shortage also means that inadequate care is offered by some hospitals and clinics and that rural areas still lag behind urban centres in maternal and child health care. This, in turn, results in patients traveling great distances to institutions in which they have greater confidence. Following an agreement between the Greek government, WHO, and UNICEF, a pilot project was set up in 1959 to conduct demonstrations, training, and investigation in subjects pertaining to public and social health. The Thessaly Health Experiment supplies transportation for doctors and nurses from rural health centres to villages not directly served by these institutions. Doctors and nurses then seek out patients, treat them, send for a specialist, or refer them to a hospital. As well as the rural medical care, the experiment comprises programmes in maternal and child health, mental health, dental care, venereal disease control, tuberculosis control, cancer detection, malaria control, environmental sanitation, inspection and control of premises where food and beverages are sold, and health education. The author feels that this experiment could serve as a model for the whole country if some modifications, such as the utilization of auxiliary workers, were introduced.

0815 **Yen, Y.C., Feliciano, G.M.** International Institute of Rural Reconstruction, New York. Philippine Rural Reconstruction Movement, Manila. *Scope of the PRRM health program.* In Price, H.B., ed., Rural Reconstruction and Development: A Manual for Field Workers. New York, Frederick A. Praeger. 1967. 247-250. Engl.

Since 1946, the government of the Philippines has improved and expanded its health services at national, provincial, and municipal levels. Each municipal health officer supervises a rural health unit, but these units provide only limited services to the barrios (rural communities), primarily because of personnel shortage. Therefore, the aim of the Philippine Rural Reconstruction Movement (PRRM) is to assist these barrios in organizing their own self-help programmes. In the PRRM, rural reconstruction workers (RRWs), who have basic training in rural health work and who live in the barrio, work closely with a group of visiting specialists in medicine, sanitation, and nursing to plan the barrio health projects. The specialized staff, with the active cooperation of the RRWs and village leaders, then initiate the projects. Daily follow-up is the responsibility of RRWs and barrio people, with periodic specialist supervision. Objectives of the health programme within each barrio include establishment of a health centre, training a team of auxiliary health workers, health education classes for mothers, village cooperation in construction of sanitary toilets, construction of sanitary drainage, maintenance of pure drinking water, and mass immunization.

II.3 Planning

See also: 0723, 0749, 0758, 0765, 0772, 0773, 0783, 0785, 0788, 0793, 0798, 0800, 0805, 0808, 0811, 0814, 0914, 0915 0954, 0965, 0997, 1006, 1017, 1029, 1058, 1064, 1089, 1091, 1145, 1153, 1314, 1322, 1329, 1330, 1334, 1346, 1347

0816 **Abdulmawjoud, A.** *Comparative study between urban and rural areas in Mosul province.* Annals: College of Medicine (Mosul, Iraq), 2-3, 1971, 200-207. Engl. 10 refs.

To assist in planning health services for Iraq, a survey was conducted in one rural area, one urban slum, and one other urban area with better designed houses. A questionnaire on family size, number of bedrooms, source of water, toilet facilities, and number of births and deaths revealed that some overcrowding and inadequate sanitation exist in all three areas, and infant mortality is high (27.9% slum; 21.8% rural; and 13.4% modern urban). Family size (average 6.1 persons in the slum, 6.8 in the better area, and 5.8 in the rural area) indicated that family planning is not practiced.

0817 **Ahmad, I., ed(s).** *Physical targets for the fourth plan (1970-75).* Peshawar, Pakistan, Khyber Medical College, 1973. 4p. Engl.
Unpublished document; document accompanied personal correspondence dated 8 Feb 1973.

Targets for the Fourth (National Health of Pakistan) Plan, 1970-75, are examined, the structure of the proposed system of health institutions to cover both rural and urban areas is outlined, and the funds and medical personnel needed are listed. Basic health units will integrate curative care for common and simple ailments, preventive care, and maternal and child health services and will serve a population of approximately 10 000. The rural health centres (one for every four basic health units) will contain 10 beds and constitute a link between the basic units and the Tehsil (subdistrict) hospital. The Tehsil hospital will contain 60 beds, offer specialized medical care and X-ray and laboratory investigations, and be staffed by two health officers, one for maternal and child health and the other for communicable diseases and health education. Finally, the district hospital will contain 250 beds and will have full diagnostic and laboratory facilities, including a blood bank, and it will constitute the centre for both institutional medical care and health manpower training.

0818 **Allbrook, D.** *Medical care, health, and national development in Australia's neighbourhood.* Medical Journal of Australia (Sydney), 2, 4 Nov 1972, 1045-1050. Engl.

An Australian doctor discusses health care needs of developing countries and examines ways in which Australia and other developed countries can cooperate effectively in health schemes of developing neighbours. Some of the theoretical and practical issues are discussed under the following headings: How to manage a health service; An example of specific health problems; The cost of pure water – a facility basic to health; How costly are hospitals?; How costly is medical education?; Who shall receive health care?; etc. The importance of establishing health services, properly managing resources and services, providing economically feasible health care, and training manpower appropriately in developing countries is stressed. Examples to illustrate these themes are taken from Indonesia and various African countries.

0819 **Allen, L.R.** *Collaborating institutions and organizations.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Medical Care, New York, Appleton-Century-Crofts, 1970, 141-154. Engl.

The author points out that the physician and his medical colleagues cannot plan, direct, and implement a comprehensive community health programme alone. Other disciplines must be involved – agriculture, engineering, sociology, education, etc. – to provide guidance in areas that directly influence health but in which the physician is not an expert. There must also be close cooperation with state and local government health authorities, not just because of the possibility of financial assistance for the programme, but because of the opportunity to promote legislative changes that might be found necessary in the course of the programme. Other potential participants in all community health programmes are the community development forces – whether official government and UN agencies, organized voluntary associations, international foundations, or benevolent citizens. They will assist in the introduction of water supply systems, agricultural improvements, family planning activities, and other essential aspects of a successful health programme. And finally, the existing indigenous health system should not be overlooked; securing the collaboration of indigenous midwives, for instance, will prove beneficial in the family planning component of the programme. Proper coordination of these different sources by the university or medical school will do much to improve the effectiveness of the community health programme.

0820 **Amegee, E., Lartey, E.** WHO, Brazzaville. *Environmental health activities in the context of an integrated concept of public health services.* Brazzaville, WHO AFRO Technical Papers No.5, 1973. 21p. Engl. 12 refs.
Also available in French.

The principal factors justifying and those facilitating the integration of environmental health activities with a public health service in the African region are examined. As in other developing countries, the region's environmental health problems relate mainly to inadequate sanitation, problems that may be solved by rational and balanced development. Such development is dependent on the coordination of different aspects of environmental health – water supply, collection and disposal of excreta and refuse, air and water pollution control, control of insects, rodents, and other disease vectors, food inspection, housing and town planning, etc. – by national administrators. National authorities are therefore urged to initiate the changes in ideas and institutions (particularly those involved in the training of personnel) necessary to an integration of all public health activities.

0821 **Badia, R. de J., Blanco, D.P., ed(s).** *Plan operativo del sector salud en El Salvador: 1973. (Operating plan for the health sector in El Salvador: 1973).* Revista Salvadorena de Hospitales (San Salvador), 4(3), Sep-Dec 1973, 362-380. Span.

This article outlines the planning process for the health sector in El Salvador, the status of the progress achieved in different health fields as of 1972, and the specific objectives to be reached in 1973 and 1977. The two major programmes – epidemiology and environmental sanitation – have each been divided into their components, for which individual objectives and the means of achieving these objectives have been listed. There are two primary objectives of the environmental sanitation programme: (1) to reduce the incidence of gastrointestinal diseases by installation of latrines throughout the rural areas (the target coverage is 81% of the rural population by 1977); and (2) to reduce the incidence of water-borne diseases by improving the supply of potable water (49% of the rural population should be served by 1977). The epidemiology programme aims at modifying the disease pattern especially in rural areas, with the emphasis on the control of communicable diseases by means of vaccination. Also noted are the plans for investment of human and financial resources, which include construction targets and reorganization of administrative procedures.

0822 **Bagchi, S.** *Rural health service: the way to improve the rural health service.* Indian Medical Journal (Calcutta), 64, Jul 1970, 147-148. Engl.

The author proposes a reorganization of the rural health service in India: (1) every primary health centre (PHC) should be expanded to a 50-bed, well-equipped modern hospital staffed by six specialists, 15 nurses, and five pharmacists/dressers; (2) every PHC should be provided with four mobile dispensary vans complete with medicines and facilities for minor operations and staffed by a doctor and pharmacist (plus driver and cleaner); (3) under the auspices of the PHC, and in telephone communication with it, there should be a few subcentres, each staffed by a recent medical graduate and a qualified pharmacist; and (4) there should be one health unit in each village, again connected by telephone to the PHC and manned by a pharmacist (or villager) with training in first aid. With proper organization of a patient referral system and a rota of visits by PHC specialists to the outlying units, the quality of health services available to the villages would be improved considerably. But professional and other staff must remain highly motivated by being assured of adequate leave, salary, travel allowance, and living quarters, as well as opportunities for promotion.

0823 **Bell, C.O., ed(s).** Papua New Guinea, Department of Public Health. *Diseases and health services of Papua New Guinea: a basis for national health planning.* Konedobu, Papua New Guinea, Department of Public Health, 1973. 647p. Engl.

Section on manpower training abstracted separately under entries 731, 741, 1114, 1115, 1170, 1193, and 1257.

This national health plan for Papua New Guinea comprises a series of reports that examine in depth the country's disease pattern, related socioeconomic data, the policies and practices of the health services, and the utilization of resources in the health sector. In addition to brief discussions on history, geography, and social conditions, there are sections devoted to the overall national health plan, the existing and anticipated health problems, the organization and administration of services, the resources available, and health manpower and training. There are numerous references, charts, and tables of epidemiological and statistical data.

0824 **Betts, R.H.** Christian Medical Commission, World Council of Churches, Geneva. *Christian medical work: a consideration of certain concepts and relationships.* In Christian Medical Commission, Annual Meeting 1970, Geneva, Christian Medical Commission, 1970, 15-26. Engl.

See entry 840 for complete proceedings.

The Christian Medical Commission has recently attempted to reappraise Christian medical work, questioning whether it is valid, how it should change, and by what means it should be changed. This reappraisal was sparked by two factors: (1) rising maintenance and staffing costs in mission hospitals coupled with a rise in the number of government-sponsored hospitals; and (2) the shift in emphasis from curative to preventive medicine in the West. Change depends on the willingness of personnel to look objectively at a situation and be flexible enough to consider alternatives. To provoke discussion, the author provides a list of questions and comments concerning Christian medical concepts and the relationship between Christian medical practice and its supporting agencies.

0825 **Bicknell, W.J.** *Alaskan rural health programs: new directions.* Canadian Journal of Public Health (Toronto), 61(6), Nov-Dec 1970, 497-502. Engl.

The lack of primary health services in Alaska, outside Anchorage, prompted the U.S. Indian Health Service and the Office of Economic Opportunity to initiate planning for a neighbourhood health centre in Bethel. This centre would serve the 18 000 people widely scattered in the surrounding small villages. The goal of quality, accessible services would require upgraded training for village aides, the establishment of native-controlled institutions, and coordination and reorganization of existing health services. Finally, it would mean involving local, regional, and state authorities. To this end a corporation, the majority of whose members are native, was formed.

0826 **Bridgman, R.F.** *Some methodologic problems in health practice research and health planning.* International Journal of Health Services (Farmingdale, N.Y.), 2(1), Feb 1972, 51-61. Engl.

Health planning has received a great deal of attention during the past 15 years, and a large number of conferences, seminars, and papers have been devoted to this subject. However, because of a lack of guidebooks based on practical experience, many health agencies, especially those in developing countries, are afraid to implement sophisticated and costly planning procedures. Instead, they continue to use the "rule of thumb" in

deciding solutions to please local authorities. The present paper suggests a practical approach to simplify the planning process. Total health programmes would be divided into three main parts: (1) environmental control and community protection; (2) personal preventive services; and (3) curative services, including rehabilitation. Each of these three main components should be defined and clear borders between them should be delineated because the methods of planning differ in each case. Leaving aside the first sector because it is in fact the responsibility of many government agencies, methods of assessing and planning personal preventive services (i.e., "needs") are studied separately from those that could be applied to curative services (i.e., "demands"). Warnings are given against easy oversimplification and ignoring of methodologic problems that could result in failure of the best theoretical health plan. (Modified journal abstract.)

0827 **Brown, R.E.** *Medical problems of the developing countries.* Science (Washington, D.C.), 153, 15 Jul 1966, 271-275. Engl. 18 refs.

The author discusses many general problems common to developing countries and points out that solutions must appreciate the complex interaction between health, economic, political, and sociological parameters. For example, controlling childhood diseases by immunization without improving food production only increases the problems of malnutrition and undernutrition. Subsistence farming, which supports most developing countries, must markedly increase output production and this increase depends on mechanization. But mechanization requires trained technicians, and teachers and training facilities do not exist. The circle often is made more impenetrable by local customs. Any realistic approach, therefore, must take into account the whole sphere of problems of which medical needs are only a part.

0828 **Bryant, J.H.** Christian Medical Commission, World Council of Churches, Geneva. *Health, national development, and population growth: possible roles for the church.* In Christian Medical Commission, Annual Meeting 1970, Geneva, Christian Medical Commission, 1970, 27-40. Engl. 23 refs.

See entry 840 for complete proceedings.

The author discusses the interaction of health and national development, the dilemma of health care and population growth, and the role of the church in health care. He points out that economists, who formerly related development solely to investment in the physical elements of national growth, have since widened the concept of investment to include manpower. Investment in manpower in the form of public health programmes not only adds to the quality and numbers of the labour force, but also tends to encourage innovative thinking by demonstrating that change for the better is possible. But what of the danger of public health programmes contributing to population growth? The author feels that: (1) continued high mortality is a morally unacceptable form of population control, and (2) reduced mortality among small children is a necessary prerequisite to the acceptance of birth control. At present, child malnutrition and overpopulation are the most pressing problems in developing countries. Both involve intensely personal decisions. The opportunity to make these decisions will depend on the availability of advice and methods at the family and community levels. The author feels that the church has at its disposal a particularly suitable resource for functioning at the local level – its manpower. He suggests that the church go beyond its usual health programmes (manned by professionals) and recruit and train members of its congregation for work in the community.

0829 **Bryant, J.H.** *Community medicine: a look at the future.* In Lathem, W., Newbery A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 311-336. Engl. 16 refs.

The author comments on the future of community medicine and its teaching in light of his analysis of economic projections for the end of this century, the social and technological developments that might be expected, and the possible problems of providing health care at that time. Extrapolation of data on the growth of population and gross national product for a variety of countries indicates that the financial gap between the less-developed and more-developed nations will remain wide and may become wider. The projected changes in government expenditure on health in the less-developed countries will unlikely bring about rapid improvements in their health services – most of these countries will face future health problems because resources will not be markedly improved. Primary health care at the community level will seldom be provided by a physician, unless there is introduction of a high incentive or compulsory, short-term service. Instead, auxiliary health workers will provide most community health services. The system of medical education, therefore, must be prepared for these developments and recognize this division of functions and responsibilities – the auxiliary to cope with the local health problems, the physician to serve as leader and manager as well as clinician.

0830 **Bryant, J.H.** Christian Medical Commission, World Council of Churches, Geneva. *Moral issues and health care.* In Christian Medical Commission, Second Annual Meeting, Geneva, Christian Medical Commission, 1969, 17-23. Engl.

See entry 842 for complete proceedings. See also entry 868.

This paper discusses the moral issues involved in the delivery of health care to large numbers of people where resources are limited. Health care for a defined population, the nation, is generally accepted as being the responsibility of the government. When it comes to the actual distribution of limited facilities, however, the moral question of who will be served and who will be deprived of health care is usually left to the physician in charge of the rural health centre. Governments aim at an adequate distribution by enlisting the help of

economists, systems analysts, and health planners. Such processes may facilitate decision-making but do not eliminate the necessity of deciding on priorities – a moral decision. The author feels that it is here that the churches may be of use; for, being free of the formal responsibility of providing health care, they are unencumbered by the political history and administrative constraints that hamper governments and are thus free to apply their wisdom and human concern to a moral choice of priorities.

0831 Burton, L.E., Smith, H.H. *Public health and community medicine: for the allied medical professions.* Baltimore, Md., Williams and Wilkins, 1970. 561p. Engl.

This book covers the wide field of medical care and its administration. It emphasizes the close "relationship and interdependencies of all community activities to promote, to restore, and to maintain the health of the people at the highest possible level." These activities derive from local through international organizations. The convergence of private medicine and public health, the methodology of public health, factors contributing to ill health, some characteristic diseases of man, and methods of disease control are discussed. Other topics covered include socioeconomic health problems, health problems of the modern age, the health team approach to combatting disease, and the limitations to progress and opportunities for action. A list of national health organizations is given. The book is of educational value and would be a useful guide to field workers.

0832 Canedo, L. *Rural health care in Mexico? Present educational and administrative structures must be changed in order to improve health care in rural areas.* Science (Washington, D.C.), 185, 27 Sep 1974, 1131-1137. Engl. 28 refs.

Mexican health services cater largely to the urban population; in fact, at the national level, the few programmes aimed at providing health care to rural communities have been inefficient and irrelevant. They have lacked coordination and cooperation between planners, educational institutions, and existing health services. Therefore, the National Autonomous University of Mexico has designed an information system that incorporates geographic, demographic, economic, social, ecological, and medical data, together with information on the responsibilities and programmes of organizations involved in health care. This information should enable planners to relate training courses to real problems and needs, to identify public health problems that require more fundamental analysis, and to ensure an organized and coordinated system of health care programmes throughout the country. The information system depends on a network of local information centres for data collection and storage and for training purposes. The university has also implemented a pilot programme in "medical ecology"; in this, students train not only in the techniques of community medicine but in the methods of obtaining and utilizing information related to rural health care so that they will be able to advise on the development of local services.

0833 Chan, S.C. *Sarawak's witch doctors give way to modern medicine.* DEPTH News (Manila), 8 Dec 1973, 1-4. Engl.

Under the Second Malaysia Plan (1971-75), the health services of Sarawak are being improved and expanded to provide basic care for the whole population through a system of hospitals, health subcentres, community health centres, and mobile medical teams. Sanitary improvements, vaccination programmes, malaria eradication, and similar activities are reducing mortality and morbidity, but further decline in these figures can be anticipated only if more emphasis is placed on preventive medicine, health education, and provision of more health centres and mobile teams. An introduction of new categories of workers (e.g., medical auxiliaries in hospitals) and a better system of supervision would also improve health services and thereby help lower morbidity and mortality.

0834 Chile, National Health Service. *Programa de atencion de la salud en el medio rural. (Rural health care programme).* Santiago, National Health Service, Sep 1967. 33p. Span. 20 refs.

The programme (Chilean) is described as being "defined" and "comprehensive"; "defined" in that the rural health centre will service a definite geographical area, and "comprehensive" in that it will attempt to establish preventive, curative, and recovery systems. The responsibilities of, the resources available to, and the training programme and curriculum for the auxiliary health worker are described. The course includes 1 month of theoretical training, 5 months of practical, and 3 months of field practice, under supervision. His activities in connection with community development, environmental sanitation, first aid, maternal and infant care, and administration are well detailed. A means of evaluating the results of the programme is outlined.

0835 Christian Medical Commission, World Council of Churches, Geneva. *Christian Medical Commission: annual meeting 1972.* Geneva, Christian Medical Commission, 1972. 64p. Engl. 20 refs.
Individual articles have been abstracted separately under entries 734, 836, 837, 876, and 1048. See also entries 839, 840, and 842.

The addresses presented by the chairman and the director, plus sections on community health care, health and social justice, and other topics are included in the report of the fifth annual meeting of the Christian Medical Commission. Under community health care papers, projects in Hong Kong, India, Nigeria, and the People's Republic of China are covered, as well as other general topics. Also included in the report are the resolutions and the financial statements of the annual meeting. The appendices include attendance and CMC membership lists.

0836 Christian Medical Commission, World Council of Churches, Geneva. *Okhla neighbourhood*

project, Delhi, India. In Christian Medical Commission, Annual Meeting 1972, Geneva, Christian Medical Commission, 1972, 11-12. Engl.
See entry 835 for complete proceedings.

A survey by the Holy Family Hospital in Delhi revealed that its services and those of several social and welfare agencies, including an industrial training school, had not affected the health problems of neighbourhood villages within a 1 1/2-mile radius. Lack of coordination among the various Muslim, Hindu, and Christian agencies led to overlapping and a minimal impact. Therefore to provide total family care through integrated health, welfare, and educational services and to raise the economic level of the population, the first task was to involve these agencies in the planning process and to achieve a team approach to the problems. This effort produced a service that began to treat every man as a whole in his environment.

0837 Christian Medical Commission, World Council of Churches, Geneva. *Critique of a community health care proposal.* In Christian Medical Commission, Annual Meeting 1972, Geneva, Christian Medical Commission, 1972, 27-28. Engl.
See entry 835 for complete proceedings.

The Christian Medical Commission was asked by the Commission on Ecumenical Mission and Relations of the United Presbyterian Church (USA) to discuss and evaluate a programme proposal for the coordination of community health services at the primary health worker level, with a view to preventing, detecting, and treating, as early as possible, all illnesses. It would involve a survey of the community, a definition of priorities, an assessment of the possibilities of coordination, and the development of a health team to implement the findings. Programme effectiveness would be measured by monitoring certain health parameters. The CMC criticisms of the proposal were threefold: (1) its authors seemed not to appreciate the radical change in hospital priorities that the proposal would demand and the fact that hospital staff might be unwilling to accommodate this change; (2) the proposal was vague on survey objectives and methodology, primary health worker training methods, and the fuction of (and relationships between) each member of the health team; and (3) it was questionable whether one model would be applicable to a number of local institutions different in terms of geography, culture, and situation.

0838 Christian Medical Commission, World Council of Churches, Geneva. *Second conference for coordinators of church-related medical work in Africa, Blantyre, Malawi, 20-25 Feb 1972.* Geneva, Christian Medical Commission, 1972. 35p. Engl.
See also entry 930.

The objective of the second conference on medical work in Africa was to bring together various coordinators of church-related medical projects and to discuss the possibilities of and problems involved in coordinating their efforts with each other and those of national governments. Five groups were formed and each discussed one of the following topics: (1) localization of personnel; (2) structural relationships of coordinating agencies; (3) orientation of missionaries; (4) conditions of government grants; and (5) cooperation and coordination of church-related medical services on the national level. Papers presented are followed by discussions, and the recommendations of groups are appended.

0839 Christian Medical Commission, World Council of Churches, Geneva. *Christian Medical Commission: annual meeting 1971.* Geneva, Christian Medical Commission, 1971. 99p. Engl.
Individual articles have been abstracted separately under entries 760, 801, 1057, and 1348. See also entries 835, 840, and 842.

Topics covered at the fourth annual meeting of the Christian Medical Commission (CMC) include: community health – progress and problems; community activity in health care and development; the identity crisis of health workers; mental health; and the evaluation of health care systems. The appendices show the financial report and lists of participants and CMC membership.

0840 Christian Medical Commission, World Council of Churches, Geneva. *Christian Medical Commission: annual meeting 1970.* Geneva, Christian Medical Commission, 1970. 110p. Engl.
Individual articles have been abstracted separately under entries 824, 828, 841, and 1122. See also entries 835, 839, and 842.

Formal papers, invited comments, and general discussion from the third annual meeting of the Christian Medical Commission (CMC) are reported. Subjects covered include: the future role of the commission in Christian medical work; the role of the church in health and development; comprehensive care; training programmes for health workers; and health care problem-solving. Health, national development, and population growth are discussed. Also reported are the resolutions of the meeting. Appendices show lists of participants and CMC membership.

0841 Christian Medical Commission, World Council of Churches, Geneva. *Health, development, and population growth.* In Christian Medical Commission, Annual Meeting 1970, Geneva, Christian Medical Commission, 1970, 40-57. Engl.
See entry 840 for complete proceedings.

The need for better planning to balance the development of individuals (reflected in the "quality of life") with the development of nations (economic growth) is acknowledged in this workshop report. The traditional role of the church in health and development is criticized, and specific reference is made to those health programmes providing care only for people who come to hospitals. Church-related programmes tend to operate in isolation; consequently, they duplicate activities

and compete unnecessarily for limited resources. Instead, the church should recognize that diverse problem areas such as poverty, health, population growth, education, and agriculture actually involve the same communities and the same families, and are closely interrelated and interdependent. It should also encourage one of its most valuable resources – the congregation – to activate the rest of the community. The church must recognize the consequences of overpopulation at national and family levels and openly discuss realistic and morally acceptable means of limiting family size. (However, improved health care and lower infant mortality must antedate lowered fertility.) To improve the coordination and implementation of its activities, the church must establish appropriate administrative structures, staffed by experienced personnel. The report is followed by invited comments and a general discussion.

0842 **Christian Medical Commission, World Council of Churches, Geneva.** *Christian Medical Commission: second annual meeting, Hogen near Zurich, 25-29 Aug 1969.* Geneva, Christian Medical Commission, 1969. 65p. Engl.
Individual articles have been abstracted separately under entries 830, 868, and 941. See also entries 835, 839, and 840.

Innovations in medical programmes operated with the support of the World Council of Churches are discussed; movements toward community health care and increased interest in auxiliary health workers are indicated. Situations in various countries are recounted by their participants. Nigeria, Tanzania, and Indonesia are singled out for more detailed discussion.

0843 **Cibotti, R.** *La integracion de la salud en la planificacion del desarrollo. (Integration of the health sector into development planning).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 66, Feb 1969, 93-105. Span.

In this article, the author deals with three aspects of the integration of the health sector into development planning. First, he discusses the financing of government health services and indicates the conditions under which such financing takes place. He stresses the need to study thoroughly economic measures, since these will determine the possibility of changing adverse conditions. Secondly, he discusses the problem of mobilizing resources for the provision of services, and he emphasizes the advisability of tying the health sector plan in with the general development plan. Special attention should be given to the scarcer expansion factors and to those that play a critical role in the provision of health services according to the "organic nature" of most activities in this sector. Finally, he describes links between the health sector and other economic and social sectors and emphasizes our lack of knowledge of the reciprocal relationships between health, education, and housing. The subject is by no means treated exhaustively. Consideration has not been given to the general criteria that should govern the formulation of goals and targets of the health sector (nor to the difficult problem of establishing priorities within and between the different sectors). The purpose of the author is to deal solely with some operational aspects of the integration of the health sector into development planning and to pinpoint and analyze the specific problems involved. (Revised journal abstract.)

0844 **Costa Rica, Ministry of Public Health.** *Actividades a desarrollar en 1974 en el programa de salud rural de Costa Rica. (Rural health activities programme for 1974, Costa Rica).* San Jose, Ministry of Public Health, General Health Division, Rural Health Programme, Nov 1973. 6p. Span.
Unpublished document.

In 1974, Costa Rica's rural health programme will extend its services to rural areas of fewer than 500 inhabitants. In 1973, 37 health posts were established and 63 new posts are planned for 1974; each post will then serve an average of 2 500 people in 585 housing units. At present the rural health posts are staffed by rural health assistants and nursing auxiliaries, but the latter are being replaced as training programmes for assistants are expanded. In 1974, 75 rural health assistants and 90 nursing auxiliaries will be trained, the courses lasting 16 weeks and 10 months respectively. Five hundred voluntary health workers will also receive 1 week training on disease surveillance (especially malaria); they will visit the inhabited areas once a month. Professional medical staff will visit the health posts regularly to supervise the assistants and to treat special cases. Several national and international organizations are assisting in this programme by providing equipment or financial aid, and the various contributions are described in the report.

0845 **Cuba, Ministry of Public Health.** *Cuba.* In Douglas-Wilson, I., McLachlan, G., eds., Health Service Prospects: an International Survey, London, Lancet Ltd., Oct 1973, 157-183. Engl.
See also entry 772.

The health services of Cuba have undergone a complete transformation since the revolution; a state-organized, community-oriented system has replaced the former service, which emphasized private, curative practice. All health activities have been brought under government control, and the national health plan provides for free, preventive and curative services for the whole population. The progress over the last decade is illustrated by reductions in mortality and morbidity. These have been achieved by increased numbers and better distribution of doctors, auxiliaries, and other health personnel; expanded training programmes; upgraded hospital facilities; and comprehensive coverage. The activities and objectives in the fields of mother and child care, nutrition, and occupational health are described in some detail.

0846 **Dass, K.K.** *Medical aid to developing countries.* Journal of Tropical Medicine and Hygiene (London), 77(12), Dec 1974, 275-277. Engl.

The author questions the value of medical aid to developing countries, and cites several cases in India in which aid programmes proved inappropriate or even harmful. For example, the UN sponsored a project to eliminate malaria but neglected to consider the possible effects on population growth and ecology; eventually the population expanded into previously uninhabited areas and provoked soil-erosion followed by flooding. In addition, the traditional way of life almost disappeared under the "cultural debris" of foreigners. Medical education and research too have suffered from foreign influences because the Western-style emphasis on specialization and fundamental research has little relevance to the malnutrition, communicable diseases, etc. of India. Similarly, the indigenous pharmaceutical industry has not developed as it should, because trade has been dominated by the "multinational" companies with their sophisticated products. The author advocates total self-reliance and a complete stoppage of aid. He believes that only then can a nation achieve its potential, and he points out that India demonstrated her resourcefulness when she dealt with the influx of 10 million refugees from Bangladesh, using only Indian medical personnel.

0847 **Dizon, J.J.** *Health status of the Philippines.* Philippine Journal of Nursing (Manila), 36, Nov-Dec 1967, 311-313. Engl.

When three types of health indicators – those associated with the vitality and health status of the population, those related to environmental conditions, and those concerned with health resources and services – are applied to the Philippines, the following facts are observed: the population is young (median age 17.1 years), with an increasing life expectancy; crude infant and maternal death rates are declining; communicable diseases are still the major problem, but fewer people are dying from them; as of 1965, 44% of the population had access to pure water and 47% to sanitary toilet facilities; the number of rural health units has risen from 244 in 1957 to 1 363 in 1967, allowing a ratio of one unit per 24 000 population; and the number of hospital beds has doubled within a 10-year period. From these observations, the author infers that despite a rapidly increasing population and a relatively slow conditioning of the environment, the health status of the population is improving.

0848 **Elnaggar, M.N., Saha, A.L.** *Genesis of the concept of comprehensive health care and its implementation in India.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 120-121. Engl.

This article gives a brief history of the concept of comprehensive health care in India from the 18th century to the development in 1952 of health centres. It notes that the success of any health programme in India will depend on health centres adequately staffed with individuals who can adapt to the local area and population and who can bring about effective contact between the people and the health centre. In 1970, the doctor-to-population ratio in some community development blocks was about 1:100 000, whereas the national ratio was 1:4 737. This maldistribution was mainly due to the concentration of medical personnel in urban areas. The author suggests that continuous research and review of all aspects of the health centre concept (e.g., operational priorities, staffing requirements) are essential for the development of working methods that will achieve maximum efficiency with existing limited resources.

0849 **Farah, A.A.** *Health problems and goals of a recipient nation.* Bulletin of the New York Academy of Medicine (New York), 46(5), May 1970, 313-323. Engl. 11 refs.

Offers of assistance to developing nations must take into account the special requirements of the recipient country. The basic health needs of Somalia's predominantly nomadic population are being approached in the following ways: (1) WHO and UNICEF programmes are being implemented to control disease; (2) a more relevant curriculum is being planned for medical students studying outside Africa and priority is being given to the training of nurses and various categories of local medical auxiliaries; (3) financial, material, and technical aid for health needs is being obtained from many different countries; and (4) priorities of the health programme are being coordinated with social and economic needs. One important priority for development planning is an extensive rural project for preventive medicine and health education.

0850 **Frith, N.C., Hausfeld, R.G., Moodie, P.M.** Australia, Department of Health. University of Sydney, School of Public Health and Tropical Medicine, Sydney. *The Coasttown project: action research in Aboriginal community health.* Canberra, Australian Government Publishing Service, Service Publication No.11, 1974. 251p. Engl. 23 refs.

This is the final report of a study done from 1966-71 of the health of Aborigines in a rural area of New South Wales (Australia). Social and medical surveys and the day-to-day records of the activities of a public health nurse provide a basis for assessing attempts to improve the health of the community. The investigation was conducted in four stages: (1) collection of basic social information; (2) examination of the health of all children (this was considered by the local people to be the most pressing health need); (3) recruitment of the public health nurse to extend observations and to develop a practical health programme designed specifically for the community; and (4) analysis of the findings on the health of the people to determine possible associations between health, social, and other variables. The authors acknowledge that the health of the community can only be improved through complex changes in the whole social, cultural, environmental, and economic system within which the Aborigines live, but they stress that particular attention must be paid to problems at the household level. Included in the report are copies of the questionnaires used in the study and detailed results of the social and medical surveys.

0851 **Gandhi, H.S., Siddhu, C.M.** *General health survey in Rural Health Field Training Centre, Kalianpur, Kanpur.* Indian Journal of Medical Sciences (Bombay), 19(6), Jun 1965, 355-367. Engl.

The field training centre at Kalianpur (India) is developing a comprehensive health care programme in selected villages in which undergraduate and graduate medical students and other health personnel will train. To help plan the teaching and research activities, a general health survey was conducted in 1961-62. The survey covered about 25% of the population, about whom information was obtained on medical history and present health status, diet, and socioeconomic characteristics. The report contains data on age and sex distribution of the population, family structure, diet, occupations, income and expenditures, sanitation, morbidity, and mortality. Of particular note are the high morbidity (255 per 1 000) and infant mortality (289.4 per 1 000), which reflect the poor diet, primitive sanitary conditions, unhealthy habits and superstitions, and reluctance to make use of the available health services.

0852 **Gelfand, M.** *Whither medicine in the next five years in Rhodesia?* Central African Journal of Medicine (Salisbury, Rhodesia), 18(4), Apr 1972, 80-85. Engl.

The future of medicine in Rhodesia is discussed in terms of the traditional Shona perception of disease, its origin, and its cure; a rapidly growing population; present and projected disease characteristics; the influence of improved communications on medical expectations; and medical education. The author feels that the training of paramedical cadres is not a solution to the current and future health manpower shortages in Rhodesia; lowering standards at the top level will cause medicine as a whole to degenerate at a time when, even in remote areas, the demand is increasing for more sophisticated medical services. Furthermore, morbidity patterns are changing such that diseases formerly infrequent or nonexistent in Africa – coronary thrombosis, peptic ulcer, diabetes mellitus, acute appendicitis, etc. – are on the rise. He predicts, rather, that future medical services will revolve around a core of both specialist and generalist services located in larger towns, while nurses with extra training and higher status than the hospital nurse will take on much responsibility at the periphery.

0853 **Gish, O.** *Resource allocation, equality of access, and health.* International Journal of Health Services (Farmingdale, N.Y.), 3(3), Summer 1973, 399-412. Engl.

Based upon experience in Tanzania, this paper relates resource allocation in the health sector to the health output by contrasting access to and utilization of available health services by urban and rural populations. The writer argues that increased health expenditures alone cannot yield an efficient health care return unless the additional expenditure is spread "thinly," in keeping with the realities of population distribution, transport possibilities, and disease patterns in most poor countries. Detailed data are presented for recurrent and capital expenditures for health facilities at different levels, and the output of those institutions is considered in terms of the volume of services offered. Those services are then measured according to their utilization by urban and rural populations. Because referral systems are found to function only marginally, it is argued that further building of large hospitals is not justified in the present situation of most poor countries. Specifically, the writer describes the ways in which Tanzania is changing its inefficient and unjust health care system. The paper concludes that the major obstacles to change are not shortages of resources nor technologic ignorance but social systems that do not place high value upon the health care needs of rural peasants.

0854 **Hall, S.A.** *Information and advisory services.* Journal of Tropical Medicine and Hygiene (London), 73, Dec 1970, 359-367. Engl. 25 refs.

In developing countries, where many large-scale employers have to house and provide total medical care for their employees and dependents, a comprehensive advisory service could deal with all kinds of problems, not merely occupational ones. Such a service would best be university-based, since the universities are currently the repositories of high quality information sources, and scientific and teaching expertise. The advisory service would entail periodic or occasional consultative visits to employers, on-the-spot investigations, analysis of sickness trends, identification of health problems (including their size, economic importance, and the evaluation of attempts to overcome them), and investigation of existing medical care facilities. The information service would answer subscribers' specific requests, keep them informed on relevant topics, and provide detailed advice on particular subjects. Practical suggestions are made on setting up and financing such a service. Finally, a brief history is presented of the Ross Institute, London, a pioneer in the field of advisory services to tropical industry.

0855 **Hasselblad, O.W., McGilvray, J.C.** Christian Medical Commission, World Council of Churches, Geneva. *Leprosy control and treatment in comprehensive community health planning.* Geneva, Christian Medical Commission, Occasional Paper No.3, Mar 1971. 5p. Engl.

Isolation and hospitalization of leprosy patients are no longer necessary because prophylactic measures, such as sulfone drug treatments, are now available to control infectiousness and prevent deformity. Most cases could be effectively dealt with in outpatient clinics; public misunderstanding of the disease, however, still persists and aggravates the problem. Too often, to avoid possible loss of employment, separation from family, and general ostracism, the patient will conceal his disease until treatment delay causes irreparable disability and he becomes totally dependent on society. Obviously, a reappraisal of the traditional approach to leprosy management is needed. The author suggests that leprosy

treatment be integrated with a programme of comprehensive community health to promote a better understanding of the disease and that medical students should be educated in leprosy-control techniques in order to take a leading role in this integration. Finally, he recommends that modern methods of leprosy management be put to use in voluntary and church-related organizations.

0856 Hawker, D. *Priorities in Nepal.* Saving Health (London), 11(4), Dec 1972, 74-76. Engl.

This brief article describes the work of the Christian medical mission in Nepal. Although helping to pioneer advances in medicine, agriculture, and education, Christian missions are now losing ground as aid pours in from foreign governments (especially China and the USA) and the United Nations. All mission schools and hospitals are to be taken over by the government or closed, but for the time being they still have their share of work. Curative medicine, however, has long taken priority over preventive measures, even though it consumes so much money and manpower. For example, at the 45-bed Pokhara hospital four doctors and six sisters (with local nurses) must cope with 50 000 outpatients and 2 000 inpatients a year, deliver 300 babies, and perform over 1 650 operations. But much of their workload could be reduced through the introduction of preventive measures such as public health education and vaccination campaigns. Therefore, a change in policy must be contemplated to achieve more long-term improvements in the health of the community. Perhaps too late to make much impression on the Pokhara community, an antenatal and child welfare clinic and a TB control programme have been introduced. The author urges workers in medical missions to curtail their pursuit of personal satisfaction from clinical medicine, and instead, to realize the value to the developing country of a good public health programme.

0857 Hellberg, J.H. Christian Medical Commission, World Council of Churches, Geneva. *Church and state in relation to health care.* International Review of Mission (Geneva), 61, Apr 1972, 161-165. Engl.

In earlier times, the medical mission working in a developing country had strong links with its parent body overseas and had little contact with the local government. The newly independent countries, however, are accepting overall responsibility for the health of their people and they wish to plan accordingly. Therefore, joint planning and sharing of resources between governments and other organizations involved in health care are essential. With particular reference to Africa, the author examines this changing relationship between the state and church-sponsored medical work, the benefits to be gained, the administrative and other problems to be overcome, and the need to determine the most effective contributions that the church can make in a national health system.

0858 Hellberg, J.H. Christian Medical Commission, World Council of Churches, Geneva. *Thoughts on health planning in developing countries. Priorities in Melanesian development, Waigani Seminar, 1972.* Geneva, Christian Medical Commission, 1972. 6p. Engl.

Too often, developing countries base their health planning on models of medical services from affluent countries, without considering their own particular needs. Prime considerations such as limited resources and public ignorance concerning health are often overlooked. The author recommends that developing countries put proposals for health care delivery through a "filter of nationalism," choosing only those methods suited to their resources. This means putting to use such concepts as decentralization, auxiliary health personnel, and intermediate technology. He points out the need for political, as well as technical, mechanisms in planning health services, since health care cannot hope to be effected in isolation from its context – total national development. Finally, the author emphasizes that successful planning has more to do with personalities than with professional expertise, and he stresses the importance of taking into consideration the human element at every level of health planning.

0859 Hellberg, J.H. Christian Medical Commission, World Council of Churches, Geneva. *Community health and the church.* Geneva, Christian Medical Commission, 1971. 74p. Engl., Fren. 45 refs.

This booklet is an attempt to explore the significance of the present emphasis on comprehensive health care and its bearing upon church-related medical work. Its aim is to help decision-makers in the difficult task of determining what to do with their resources to bring health services more effectively to larger numbers of people. Topics discussed include the following: health needs, with emphasis on child nutrition and hygienic conditions; means of meeting those needs through comprehensive care; some principles of, and misunderstandings about, comprehensive community health; steps toward community health, including the elaboration of such concepts as auxiliary health worker, weight chart, skill pyramid, data gathering, priorities, etc.; some examples of community health in the home, the health centre, and the hospital; and finally, community health and the church.

0860 Hirschborn, N., Chen, L.C. *Prospects for health in Bangladesh.* In Chen, L.C., ed., Disaster in Bangladesh, New York, Oxford University Press, 1973, 3-8. Engl.

See also entry 1324.

In Bangladesh, at present, there are 1 500 persons per square mile, and the population is increasing by 3% annually. Because arable land is limited, food production is unable to keep pace with this increase, and malnutrition is widespread. Poor personal hygiene and overcrowding predispose the weakened population to serious infectious diseases and it is estimated that no more than 5% of the people have access to modern medical facilities or even to clean water and sanitation. Economic resources are limited, and health programmes have received low priority. From 1965 to

1970, Pakistan invested only 2% of its annual budget in health; in part the government has feared that reducing mortality would further exacerbate the overpopulation problem. It has been shown, however, that this century's population explosion preceded the introduction of modern health measures and that it is more closely correlated with socioeconomic development (improved shelter, imported food, etc.). In fact, disease eradication has often eased the situation by permitting malaria-infested land to be reclaimed and by improving the productivity of the work force. It has also been argued that high infant and child death rates actually encourage overpopulation since parents spawn a large number to ensure that some children reach adulthood.

0861 **Hofvander, Y.** *Integration i u-hjalpen. (Integration in aid for developing countries).* Nordisk Medicin (Stockholm), 87, Sep 1972, 215-216. Swedish.

This discussion of Swedish medical aid to developing countries calls for a more integrated approach to health care than is presently provided by relief contributions. Only 4% of the Swedish International Development Authority (SIDA) budget for 1971-72 was allotted to health services and nutrition programmes; a much smaller percentage was allotted to family planning. Medical personnel constituted slightly more than 6% of all personnel offered by SIDA to developing countries. The health situation in developing countries is reviewed generally with a view to discovering the areas where aid is most needed. The changing code of the physician – from clinician to administrator and organizer of the health team – is pointed out. It is recommended that emphasis be put on preventive child care through under-fives' and maternal and child health clinics; that family planning be integrated with these services; and that Swedish medical students be allowed to substitute medical service in a developing country for military service.

0862 **Howard, L.M.** USA, Agency for International Development, Department of State. *Key problems impeding modernization of developing countries: the health issues.* Washington, D.C., Agency for International Development, Department of State, Dec 1970. 55p. Engl. 41 refs.

This report of the U.S. Agency for International Development analyzes the relationship between health and modernization in the developing world and attempts to identify key problems that impede achievement of modernization goals. After defining the concepts "modernization," "disease," and "health," the report discusses the main health obstacles to development: the biological, administrative, and social/cultural barriers. Three key problem areas demand immediate action: inaccessibility or absence of an effective health care delivery system through which services for family planning, malnutrition, and disease control can be made available to more than a small portion of the population; inefficient planning and poor financial control of health services; and inefficient utilization of food.

0863 India, Ministry of Health and Family Planning. *Minimum need programme for health sector.* New Delhi, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 3p. Engl.

Unpublished document. See also entry 864.

The following "minimum need programmes" for the health services have been proposed in the fifth 5-year plan (1974-79) in India: (1) establishing 600 additional primary health centres (PHCs) to cater to the expanding rural population; (2) upgrading 1 500 PHCs (i.e., one of every four already in existence) into 30-bed rural hospitals; (3) increasing the number of subcentres from 40 000 to 48 000; (4) providing adequate funds for drugs (12 000 rupees per annum per PHC); (5) working to compensate for the 40% deficiency in construction completed during the fourth 5-year plan; and (6) continuing the National Disease Eradication and Control programmes. In addition, multipurpose health workers will be deployed differently at the peripheral level. The territory surrounding each PHC will be divided into three sectors, each of which will contain four subcentres. One male and one female community health worker will staff every subcentre and will share the tasks of vaccination, health education, data collection, disease surveillance, sanitation, family planning, first aid, MCH, and supervision of dais. A sanitary inspector and a "lady health visitor" at the sector level will supervise the community health workers, and in turn a health assistant and public health nurse from the PHC will supervise them. Two doctors at the PHC will have overall responsibility for health and family planning activities.

0864 **India, Ministry of Health and Family Planning.** *National strategy on health.* New Delhi, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 22p. Engl.

Unpublished document. See also entry 863.

This document summarizes the national approach to health planning included in India's fifth 5-year plan, which emphasizes improved health care delivery for the rural areas and expansion of services. Objectives include establishing one primary health centre for every 30 000 people and one subcentre for every 5 000; providing one basic health worker for every 5 000 people; increasing the number of hospital beds in the rural areas to one per 1 000; implementing a family planning programme to curtail the population growth to 15 per 1 000 by the end of the fifth plan and to reach zero growth rate by the end of the sixth plan; providing pure drinking water and sanitation schemes for all communities; and reorganizing medical education to produce more "basic doctors." The background considerations (e.g., present inadequacies, financial support) behind these objectives are described in an appendix.

0865 **Jara, J.B.** *Salud: urbano o rural? (Urban or rural health?).* Vida Medica (Santiago), 20(3), Mar 1968, 16-17. Span.

The conclusions reached at the XVII Meeting of the Directive Council of the Pan American Health Organization held in 1967 in Port of Spain (Trinidad) are summarized by the Chilean representative. Under the theme of "Systems to increase health care coverage in the rural areas," recommendations were made to the individual governments to recognize the rights of rural as well as urban residents to adequate health care. Chile's rural health care programme is briefly outlined. The country is to be divided into 150 rural areas; with the establishment of 30 rural health centres per year, the programme is expected to be fully operational within 5 years.

0866 **Jara, J.B.** Chile, National Health Service. *Salud rural: medicina integral para las areas campesinas. (Rural health: comprehensive health care for the rural peasant worker).* Santiago, National Health Service, Sep 1967. 8p. Span.
Unpublished document.

Thirty percent of the Chilean population, i.e., the peasants, are without adequate health care. The National Health Service has established 461 health centres, each manned by an auxiliary health worker with the occasional help of a medical team, to act as satellites of base hospitals. These centres do not, however, provide the necessary services, and as a result the facilities of the base hospitals are overcrowded with rural patients who waste time and money traveling to them. This paper suggests that the peasants should be provided with health care through the rural health centre. The auxiliary health worker should be locally recruited and trained in activities related to community development, and health protection and preservation. His function should be carried out with the regular assistance of the professional health team based at the rural base hospital.

0867 **Jara, J.B.** Chile, National Health Service. *Bases para un proyecto de convenio UNICEF-SNS para el desarrollo de la salud en el medio rural de Chile 1968-1972. (Basis for a joint UNICEF-National Health Service (SNS) of Chile rural health project, 1968-1972).* Santiago, National Health Service, Sep 1967. 25p. Span.
Unpublished document.

This project aims at promoting integrated medical practice to improve environmental sanitary conditions and to assist the development of rural Chilean communities. To reach the health levels proposed, the government seeks to implement programmes in community organization, rural vaccination, basic rural sanitation, food control, maternal and infant care, milk distribution, dental care, and rural health recovery. All these programmes will be financed by the National Health Service in conjunction with UNICEF. The document for the project defines the following concepts: rural health centre, rural health area, rural health post, and health team. The last comprises a physician, a dentist, a nurse, a midwife, a sanitation inspector, an auxiliary health worker, and a driver. This project will benefit about 30% of Chile's total population. Although the solutions of health problems at the rural level will represent a considerable expenditure, this will be counteracted by a reduction of the strain on urban medical facilities and increased agricultural productivity due to reduced absenteeism. The 141 rural health centres throughout the different provinces and statistical data on the probable goals to be achieved throughout the 5-year period of the project are listed.

0868 **Jenkins, D.** Christian Medical Commission, World Council of Churches, Geneva. *Theological comments on the issues raised by John Bryant.* In Christian Medical Commission, Second Annual Meeting, Geneva, Christian Medical Commission, 1969, 23-30. Engl.
See entry 842 for complete proceedings. See also entry 830.

The challenge of responding to problems existing in health services distribution requires that the church relate to comprehensive community health care. Although the author's suggestions are primarily theological in nature, he does suggest that the existence of the poor and ignored is a comment on society and its priorities and should be an important and decisive consideration in decision-making.

0869 **Johnson, K.G., Sibley, J.R., Kim, C.N., Kim, I.S.** *Koje Island illness and health care patterns.* Yonsei Medical Journal (Seoul), 11(2), 1970, 160-172. Engl.

To determine the health care needs and practices of the area covered by the Koje Do Community Health and Development Project (Korea), trained public health nurses conducted a survey of 971 members in 160 randomly selected families from the eight villages. The questionnaire sought information on illness incidence, diagnosis, treatment, sources of treatment, and reasons for failure to obtain treatment. The data obtained have been examined in relation to socioeconomic factors such as age, sex, occupation, education, and family size. A detailed statistical analysis of the results is provided. By ranking the villages according to rates of illness, incapacitation, and treatment, it is possible to determine which of them would benefit most from the introduction of mobile clinics.

0870 **Lambourne, R.A.** Christian Medical Commission, World Council of Churches, Geneva. *Mental health, Christian medical mission, and the future concept of comprehensive health care.* Contact (Geneva), 9, Jun 1972, 1-8. Engl.

The author compares the impact on medicine of psychiatry with that of public health in order to point out the implications of introducing a programme of psychiatry in medical missions. Public health began as an individual discipline, then permeated our understanding of other disciplines (e.g., obstetrics, pediatrics, etc.), and finally became a unifying concept that changed our understanding of health. Health is no longer perceived as a state of the individual, but as a state of the community. When psychiatry is regarded as the unifying concept in our understanding of health, health becomes

"people in harmonious living"; however, to approach this state, the health promoter must be aware of certain preconceived notions and value judgments. These may be "givens" in his culture, but perhaps not in the culture with which he is dealing. Because of this, a whole philosophy and a whole value structure are implicated – hence the political nature of both psychiatry and public health. The author feels that psychiatry and mental health definitely do have roles to play in medical missions, but that particular care and sensitivity must be exercised in their practice in order that they not become an affront to human dignity and values.

0871 **Lambourne, R.A.** Christian Medical Commission, World Council of Churches, Geneva. *Secular and Christian models of health and salvation.* Contact (Geneva), 1, Nov 1970, 1-11. Engl.

The author discusses medicine in the light of the Christian view of excellence. He claims that concepts of excellence in medicine have become stereotyped and cites, as an example, a famous African pediatric hospital. For 50 years, it provided its patients with top-notch care yet the infant mortality in its immediate vicinity was not altered in all that time. He points out that the decision to provide medical care is a moral one, since, in deciding who shall have and who shall be denied, one is deciding who shall live and who shall die. Because church-related hospitals, like secular hospitals, are becoming too expensive to maintain, the author sees an opportunity (indeed a moral obligation) to develop a new vision of health and health care. This vision will demand that more attention be given to the community and that this new orientation be reflected in medical training. The author's model of health is illustrated by a "health map."

0872 **Lubin, J.W., Knee, J.K., Crystal, R.A.** USA, Department of Health, Education, and Welfare. *Statistics for comprehensive health planning.* Washington, D.C., National Center for Health Statistics, Department of Health, Education, and Welfare, Jun 1972. 242p. Engl. 29 refs.

Procedural guidelines in comprehensive health planning for reference use by health statisticians and health planners are presented. This work attempts to provide answers to the following questions: what data are required for comprehensive health planning? what conceptual and working models can be developed for obtaining these data? The book is organized according to the following topics: role of statistics in comprehensive health planning and evaluation, integration of data in information systems for planning, health statistics, demographic and socioeconomic data, health manpower statistics, health facilities data, health services statistics, and organization of statistical activities for environmental health planning.

0873 **Mahidol University, Faculty of Public Health, Bangkok.** *Comprehensive rural health programme: demographic and health survey, Dec 1971-Jan 1972 and Apr 1972.* Bangkok, Mahidol University, Faculty of Public Health, 1972. 45p. Engl.

Recognizing the need for adequate statistical data in health service development, the Faculty of Public Health, Mahidol University (the only university-level public health training institute in Thailand) undertook the task of collecting such data. Statistics were assembled to assist in the administration and coordination of health services, in short- and long-term planning, in research, and in providing health and health-related agencies with background information. They included data on population, socioeconomic conditions, mortality and morbidity, maternal and child health, birth control practices, and environmental sanitation. This booklet, distributed to staff, students, and health personnel, contains the results of two demographic and health surveys conducted in six areas of Thailand from December 1971 to January 1972, and in April 1972.

0874 **Marwah, S.M., Tiwari, I.C., Rao, N.S.** *Need for action research approach for evolving comprehensive health care practices.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 142-143. Engl.

The objective of this paper is to emphasize the need for action research projects in order to evolve desirable patterns for providing graded comprehensive health care. At present, there are two leading trends in the provision of health care – health centre and health insurance approaches. The important health care patterns and their trends in India have been discussed under three subheads: (1) through government and semigovernment agencies; (2) through private agencies; and (3) the evolutionary trends and need for action research. (Revised author introduction.)

0875 **Mayeur, M., Jara, J.B., Fernandez, R.F.** Chile, National Health Service. *Plan Huapi: proyecto de desarrollo de las comunidades indigenas Mapuches de las provincias de Malleco y Cautin, Republica de Chile. (Huapi Plan: development project for the Mapuche native communities of Malleco and Cautin provinces, Republic of Chile).* Temuco, Chile, Zone 10, National Health Service, n.d. 7p. Span.
Unpublished document.

The purpose of the project is to incorporate Chile's indigenous communities into the productive life of the country as a whole through a comprehensive integral development plan. The Huapi Plan, as it is called, will be carried out with the cooperation of the Belgian government. It consists of five simultaneous programmes, i.e., community development, medical care, education, farming, and housing. The first three programmes are in the initial stages of development. Personnel, equipment, and other supplies necessary to the successful implementation of the plan are listed. One-third of the total 1966 budget for the project has been allotted to medical care.

0876 **McDowell, K.E.** Christian Medical Commission, World Council of Churches, Geneva.

Health services in the Lardin Gabas area, Northeast State, Nigeria. In Christian Medical Commission, Annual Meeting 1972, Geneva, Christian Medical Commission, 1972, 20-21. Engl.
See entry 835 for complete proceedings.

A proposal to rebuild existing hospitals in the Lardin Gabas area of Nigeria, as a means of modernizing the region's medical care system, was rejected by the board of the Church of the Brethren in favour of a plan for a simple, low-cost, well-knit, and well-planned health care system. In this system, local communities would be involved with building and developing new health centres and training indigenous paramedical personnel to provide a core of trained people available for service. Efforts would be made to minimize the migration of trained people to the towns. The execution of the plan would be a cooperative venture of the government, the churches, the University of Zaria, and the community.

0877 **Mehryar, A., Farrokh, K.** *Some implications of a community mental health model for developing countries.* International Journal of Social Psychiatry (London), 21(1), Winter-Spring 1975, 45-51. Engl. 34 refs.

In developing countries, progress often upsets social institutions and their psychological foundations; this paper argues that health services should anticipate the resulting mental problems. The authors suggest a preventive approach and discuss generally a community health model. This would be an extension of the public health system – primary, secondary (early detection and treatment), and tertiary(rehabilitation) prevention. For example, the community mental health workers would discourage disruption of family ties so that interpersonal relationships that are supportive would be preserved. Eventually, the community mental health services would be integrated into the "wider framework of human service agencies."

0878 **Mehta, J.N.** *Thoughts on current medical problems.* Journal of the Indian Medical Association (Calcutta), 48(11), 1 June 1967, 557-561. Engl.

In this lecture, the author offers his opinions on the problems to be overcome in a national public health programme in India. With greater emphasis being placed on preventive medicine, and with the increasing scope and functions of the community health services, there must be a broadening of the range of a doctor's duties as well as an increase in the number of practitioners. But the author cautions that by channeling too much of the country's financial resources into new medical schools, there is a risk of neglecting to improve the facilities of established schools or improve the salaries and working conditions of existing staff. One economy would be greater utilization of nurses, auxiliary health workers, and other paramedical personnel. Expansion of present health services must also reflect the different conditions and requirements that exist between rural and urban areas. Doctors practicing in rural areas will require special training and incentives such as transportation, housing, and refresher courses. Other aspects of the health services requiring further attention are health education activities and maternal and child health services. Finally, the author notes the resurgence of interest in the traditional Ayurvedic medicine, and urges that possibilities for its integration with modern techniques be investigated.

0879 **Navarro, V.** *Planning for the distribution of personal health services.* Public Health Reports (Washington, D.C.), 84(7), Jul 1969, 573-581. Engl. 56 refs.

Planning for personal health services involves four steps: elaboration, acceptance, implementation, and evaluation. This paper discusses six methods of elaboration, based on the following: morbidity, mortality, utilization, distribution, system performance, and system structure. The morbidity method involves a determination of the "need" for medical care as determined by population morbidity – as "perceived" by the individual, or as "defined" by the health professional. The mortality method assumes the existence of a constant ratio of health service utilization to mortality. As mortality statistics are generally more easily obtained than those of morbidity, this method is sometimes considered the more reliable of the two. The utilization method takes present use of existing health resources as an indicator of future use. It is based on the objective concept of "demand," rather than the subjective concept of "need." The comparative method applies the ratios of resources-to-population from an adequately covered area, to an inadequately covered area, whereas the demand analysis extrapolates present demand to the future. Distribution and coordination refer to geographic and functional relationships between resources and population served; the approach may be "facilities-centred" (e.g., an analysis of hospital discharge by area) or "population centred" (analysis of current hospital use by a defined population). The methods based on systems analysis attempt to determine the required resources by the amount and type needed to achieve a defined output measured in terms of performance. System structure methods are based on a knowledge of the internal relations among the system's parts. Mathematical formulas and/or specific studies from many countries are given to support each method.

0880 **Nugroho, G.** *New approaches to health care delivery.* Solo, Indonesia, n.p., n.d. 5p. Engl. 12 refs. Unpublished document; courtesy of Dr. G. Nugroho, Prosperous Indonesia Foundation, Jl. Slamet Riyadi 309.

The author discusses the philosophy behind a low-cost community health programme currently being implemented in various villages in Central Java (Indonesia). The programme makes use of existing facilities but does not rely on a preconceived concept or design – rather, it is drawn up on the basis of the local situation and its resources. Community involvement is enlisted at the beginning of the planning process and maintained throughout. An ecological approach, which considers man in the context of his environment, is seen as fundamental to this type of planning. Often solutions recommended fall into the realm of development rather than

community medicine as conventionally understood. In one village, annual malnutrition due to low food productivity was completely eradicated by the implementation of an irrigation system. The author ends with the reflection that persevering, imaginative leadership is more crucial to community development than is large capital or highly developed technology.

0881 **Pai, D.N., Contractor, M.I.** *Health of rural Adivasis.* Indian Journal of Medical Sciences (Bombay), 18(12), Dec 1964, 716-721. Engl. 12 refs.

The Adivasis of Kosbad Hills (India) live in isolated settlements, where they are seldom reached by the overworked district medical services. Living conditions and sanitation are poor, and the superstitious people are strongly influenced by traditional concepts of health and disease. A survey of vital statistics showed a crude birth rate of 62 per 1 000, crude death rate of 26 per 1 000, infant mortality of 166 per 1 000 live births, and a morbidity of 322 per 1 000. Morbidity and mortality could be greatly decreased by preventive measures, such as immunization and nutritional advice. A maternal health survey revealed that early marriages were common, couples were fertile, families averaged 3.1 live births and rarely used district medical services. The authors believe that any new health programmes for this region should be introduced in the following order of priority: population control, safe water supply, eradication of smallpox, eradication of tetanus, midwifery services, better nutrition, better education, and improved medical care.

0882 **Papua New Guinea, Department of Public Health.** *Papua New Guinea national health plan 1974-1978.* Konedobu, Papua New Guinea, Department of Public Health, Oct 1974. 440p. Engl.

This comprehensive report provides information on the 5-year national health plan for Papua New Guinea, the major objectives of which are to provide basic health services equally to all people, to decentralize decision-making, to develop a health education programme, and to control the country's major diseases. The approach to planning is discussed as well as the budget strategy and the available resources (manpower and facilities). The whole range of health activities is examined – family health, laboratory services, nutrition, environmental health, family planning, etc. – and for each there is a statement of the national objective, the nature and extent of existing problems and constraints, and the way in which resources and programmes will be organized to achieve specific targets. There are chapters devoted to management development, pharmaceutical services, international aid, organization of staff and activities at headquarters and district levels, and community involvement/development. Staff resources are considered separately. The text is supplemented by tables of manpower, epidemiological, demographic, financial, and other data, organizational charts, job descriptions, and specific timetables for the development of programmes.

0883 **Penido, H.M.** *Health objectives in Brazil.* In Long, E.C., ed., Health Objectives for the Developing Society: Responsibility of Individual, Physician, and Community, Durham, N.C., Duke University Press, 1965, 33-52. Engl.

The author describes how the social history of Brazil has sharply separated rural labourers from land owners and professional classes. This "rigid social dichotomy" prevents any strong community spirit, even in the health field. Social and cultural barriers also frustrate the government's attempts to modify traditional health practices and to introduce modern preventive health measures, especially in the rural areas. Infectious and parasitic diseases are widespread, and, aggravated by malnutrition, continue to cause high infant mortality. Eradication of these diseases and improved distribution of physicians throughout the country are major objectives, but because health programmes must compete with industry, agriculture, transportation, etc. for finances, modest goals might be more attainable, such as improvements in water supply and sanitation and construction of medical facilities in strategically located towns. The author believes that the principal role in the development of health in Brazil's communities will be played by the physician, for his function and education almost ensure the respect of the community. However, he could be better prepared for this role if the schools of medicine were to emphasize the social aspects of the profession and the behaviour of individuals and community.

0884 **Popov, G.A.** WHO, Geneva. *Principles of health planning in the USSR.* Geneva, WHO Public Health Papers No.43, 1971. 172p. Engl.

The principles of health planning in the USSR are discussed, and the WHO definition of health planning is applied to these principles. A plan in the USSR must conform with government policy in the field of public health and with economic and social development. It must also be flexible, allowing for unforeseen changes in indices; it must be costed and must cover a time period appropriate for the achievement of its objectives. The community for which it has been formulated must find a plan acceptable, and the plan itself must take into account demographic, social, cultural, economic, and administrative conditions; it must coordinate available resources and incorporate a method for observation, recording, and evaluation at all stages. In the USSR, establishment of norms and standards is one of the most important methods used in planning. Norms are scientifically determined through research, while standards, fixed arbitrarily, are based primarily on resources. Health forecasting depends on a study of the present level of health, present facilities and manpower, and trends in services. Morbidity, mortality, and an estimation of unrecognized disease are presented and compared with similar data from other countries. Outpatient and inpatient facilities and manpower in the USSR are outlined, and comparisons with other countries are made. Geographical and climatic indicators that affect health status are explained. Formulas suitable for short-term planning (those that do

not take into account daily numbers of patients seeking care) are set forth, and the author's proposed mathematical formula for long-term planning is described. Statistical data are tabulated and indices for use in public health planning and evaluating effectiveness of care are annexed.

0885 **Prost, A.** *Services de sante en pays africain: leur place dans des structures socio-economiques en voie de developpement. (Importance of African health services in changing socioeconomic structures).* Paris, Masson et Compagnie Editeurs, 1970. 158p. Fren.

Central to the themes developed in this book is the idea that a plan of development is not feasible unless it includes the provision of public health. While bearing in mind the national and regional diversity that exists in Africa the author attempts to characterize the state of health in Africa as a whole and makes recommendations concerning health services planning. The subject is treated under the following topics: a broad outline of "underdevelopment"; poor health as a cause and consequence of underdevelopment; evaluating a country's state of health through indicators and statistics; a detailed study of the state of health in six countries – Algeria, Tunisia, Morocco, Senegal, Niger, and Dahomey; choosing priorities in drawing up a health plan; public health, the primary objective; physician education and schools of medicine; and the "brain drain." Numerous references are cited.

0886 **Pustovoj, I.V.** *Training of medical staff in health planning in the Soviet Union.* International Journal of Health Services (Farmington, N.Y.), 1(1), 1971, 28-36. Engl.

The efficiency of the organization of curative and preventive care in the USSR is dependent upon the health planning system at all levels: district (ucastock), regional (oblast), and national (republic). At the district level, planning is mainly concerned with distribution of basic specialist forms of care among specific services and institutions; at the oblast or regional level it is concerned with the solution of certain strategic tasks (e.g., studying the population's curative and preventive care requirements and establishing suitable local reference standards for current and long-term planning). At the national or republic level, it is concerned with long-term decisions as a part of the national economy, disease eradication and fundamental health improvement in accordance with government directives, coordination of work by different departments for the protection of the environment, development of the medical industry, and training staff for the health services. Recognizing the need for qualified medical planners at each of these levels, the Soviet Union has designed model curricula for a series of special courses in health planning. The training requirements and curricula of these courses are described and listed in this paper.

0887 **Rao, K.N.** *Health in developing countries.* Indian Journal of Public Health (Calcutta), 13(2), Apr 1969, 70-76. Engl.

The author briefly surveys the social and economic characteristics that are responsible for the enormous health problems of the developing world. In the past, social and economic plans have been separated from those of health instead of being integrated into an overall development plan. Therefore, health investments have not been balanced appropriately between rural and urban areas, the young and old, and curative and preventive services. Nor has the need for a comprehensive family planning programme been recognized. Administration of the health services should be appropriate to the needs of a developing country, and it should emphasize decentralization and community participation at the local level rather than a hospital-oriented care.

0888 **Rao, P., Gupta, S.** *Child health in a rural community of South India.* Indian Journal of Pediatrics (Calcutta), 35(246), 1968, 327-330. Engl.

This study investigated the socioeconomic status, patterns of child health, infant feeding practices, and dietary habits of rural dwellers in India. A typical southern village of 250 families was surveyed, and information was obtained on family organization and size, age and sex distribution, economic conditions, diet, education, sanitation, health problems, birth and death rates, and attendance at the local health centres. The authors present the data obtained and suggest that intensive health education (particularly on child care, family planning, and nutrition) would at least improve utilization of the limited resources available.

0889 **Rice, D.T.** *Three paradoxes in health development.* Public Health Reports (Washington, D.C.), 81(10), Oct 1966, 885-890. Engl. 9 refs.

Social and political pressures tend to restrict health planning in developing areas, and long-term improvement in the health of the population will require a change of emphasis: (1) preventive measures would be a better investment than curative services; (2) health facilities and training programmes should meet the specific requirements of the particular country, instead of merely imitating inappropriate Western systems; (3) increased use of minimally trained local auxiliary health workers would reduce costs without compromising effectiveness - they often obtain more cooperation from the community than do fully trained professionals who may fail to communicate effectively. Brief examples of the successful introduction of auxiliaries into the health care system are reported from Ethiopia, Ghana, Peru, and the Mexican and Indian communities of the USA.

0890 **Rice, T.J., Meyer, R.J.** *Raising the level of child health in a rural community: a model.* American Journal of Public Health (New York), 60(12), Dec 1970, 2284-2288. Engl. 15 refs.

The hypothesis that lower health standards exist in rural communities (USA) and that they are due to poor coordination of available health services spearheaded a model that seeks to improve child care by coordinating existing services. The model has four stages: entry into

the community, data gathering, evaluation, and treatment of health problems. The last three stages overlap chronologically and apply to individual and health care system alike. This model was tested in a rural mountain community in Virginia. The first stage (entry) followed 14 months of priming the community through the county newspaper and local leaders. Of the 75 children in the public school (grades 1-4), 72 participated. Citizens' groups gathered demographic data, and medical histories were compiled from school, public health, and hospital records. A comprehensive physical examination of each child completed data gathering. These data revealed an average of five health defects per child, whereas the national average is four. The data collection process also pinpointed the system's problem: services were not coordinated. Three private physicians, the public health nurse and physician, the hospital at the University of Virginia, and a nonlicensed male midwife, who were all within 25 miles of the community and all providing services, almost never communicated with each other. To treat the system's deficiency, the group testing the model visited, phoned, and wrote to each health resource and outlined every child's health status. Also, the nurse became coordinator for the community's health care. Follow-up evaluation is recommended.

0891 **Sandosham, A.A.** *Medical and health services in the context of national development.* Medical Journal of Malaya (Singapore), 22(4), Jun 1968, 259-262. Engl.

The author has surveyed the academic and professional aspects of health services in Malaysia. He comments that locally trained nationals would make the best doctors for the local population because they have been brought up in the same environment and understand and appreciate the cultural background of the people. However, new medical schools in Malaysia must be established, for at present there is too much reliance on expatriates and Malaysians trained in foreign medical schools. There should also be more facilities for local postgraduate and continuing medical education to provide intellectual stimulation for the doctor. Caution is required to ensure that the Malaysian medical system, which is based on British traditions, does not develop the rigid hierarchy that has contributed to the "brain-drain" of doctors out of Britain. A committee of enquiry consisting of members of the profession, the public, and government should be established to review the structure of medical practice throughout the country and determine what the present and future requirements really are.

0892 **Satyanand, D., Singh, M.V.** *Ambulatory-domiciliary management of mental health problems in India.* Indian Journal of Medical Research (New Delhi), 55(7), Jul 1967, 785-789. Engl.

As an alternative to confining the mentally ill to inpatient treatment, this pilot scheme extended mental health services in India into the community. Two district psychiatric teams, each consisting of a psychiatrist, a clinical psychologist, a psychiatric social worker, and an orderly, provided therapeutic and preventive services via outpatient clinics, lectures on "positive mental health" at various social and educational institutions, psychodrama demonstrations, and poster displays. Attendance figures at the clinics (based at local health centres) were encouraging in urban areas, satisfactory in semiurban areas, but poor in rural areas; this difference was attributed, in part, to a greater persistence of fears and superstitions in the rural district. The authors describe some of the specific activities of the teams; they also point out that medical practitioners and the public have much to learn about mental illness, and high priority should be given to mental health education.

0893 **Strang, P.** *A missionary doctor's disquiet in Papua New Guinea.* Contact (Geneva), 21, Jun 1974, 11-14. Engl.

The author, liaison officer between the Churches Medical Council and the Ministry of Health in Papua New Guinea, describes how the churches must reexamine their involvement in health care. Missionary orderlies and nurses are working for lower salaries than are their equivalents in the government health service; the missionary doctor is being poorly utilized – he spends too much time on routine clinical work, which does not really require his presence, and yet is insufficiently involved in staff training, preventive medicine, and community health; and the church medical services are being restricted to certain well-defined areas, although their resources could be extended into the surrounding "government territory." Any overlap, duplication, or underutilization of existing missionary and government health services must be rectified, and wage disparities eliminated. This rationalization is not to be regarded as a retrogressive, less Christian approach; instead, it represents a realization that missionary health workers must broaden their horizons and leave their hospitals to enlist community help and involvement, so that the church medical services will become an integral part of the Papua New Guinea community of the future.

0894 **Taylor, C.E., Leslie, C.** *Asian medical systems: a symposium on the role of comparative sociology in improving health care.* Social Science and Medicine (Oxford), 7(4), Apr 1973, 307-318. Engl.

Historians, sociologists, anthropologists, a philosopher, and physicians trained in modern and Asian medicine attended a symposium to discuss the relationship of Chinese, Hindu, and Arabic medical systems to the emergence of Western scientific medicine. Analyses of these traditions are theoretically important for medical sociology and relevant to the practical problems of improving medical care. In particular, this report of the symposium concentrates on the possibility of incorporating local practitioners of traditional medicine into government health services and emphasizes the need for research into health practices, concepts of disease, and traditional remedies.

0895 **UNICEF, New York.** *Supply notes: guide lists of basic equipment for health centres.* New York,

UNICEF, Jun 1961. 1v.(various pagings). UNICEF/65-40447/SUNO-7. Engl.

Guide list "Suno" is number seven in the lists of basic equipment for health centres prepared by the United Nations Children's Fund. Formulated for an "intermediate" centre, the list is suitable for a centre with staff capability between those that qualify for "Anna" and "Lena" equipment lists. "Anna" is appropriate to a subcentre staffed by a nurse or midwife and health assistant, and "Lena" is suitable for a health centre staffed by a doctor or senior medical assistant, a nurse, a midwife, and a sanitary inspector, and that is responsible for the supervision of at least three subcentres. "Suno" contains equipment and clinical items from "Anna" and "Lena," and from two additional lists, "Bertha" and "Clara." "Bertha" is a guide list for a maternal and child health centre staffed by a nurse, auxiliary nurse, or midwife operating without regular supervision; "Clara" is for a centre staffed by a doctor and two paramedicals. Each item of equipment is accompanied by a short description or catalogue number and its estimated cost.

0896 **UNICEF, New York.** *Revision No. 1 of list "Flora": UNICEF midwifery kits.* New York, UNICEF, Nov 1956. 4p. UNICEF/OSU-1509. Engl.

Guide list "Flora" comprises descriptions and prices of United Nations Children's Fund (UNICEF) midwifery kits. These include "simple" and "intermediate" kits for the indigenous midwife, and the "advanced" kit for the fully trained midwife, plus a few optional items. This version supercedes all earlier lists and is now the basic reference for implementing midwifery services.

0897 **UNICEF, New York.** *Guide list: "Lena".* New York, UNICEF, Jul 1956. 39p. UNICEF/73-44729/OSU-1330. Engl.

Guide list "Lena" includes the technical equipment and supplies, with their respective prices, proposed for a rural health centre and district hospital by the United Nations Children's Fund (UNICEF). The items are listed under the following headings: clinic and ward equipment, laboratory supplies and equipment, reference books, dental equipment and expendables, X-ray equipment, transport, standard UNICEF kits (one for midwives, another for public health nurses), and special drugs for the rural health centre and subcentres.

0898 **USA, Department of Health, Education, and Welfare.** *Planning for hospital pharmacies.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(HRA)74-4003, 1974. 125p. Engl.

These guidelines are intended for pharmacists, pharmacy consultants, architects, administrators, and all others engaged in planning hospital pharmacies. The first section, on the planning process, contains a series of worksheets that will help clarify such aspects as workload and workflow, space and staffing requirements, relationships with other departments, etc. This is followed by advice on the organization and operation of the pharmacy, including its location and construction, its administration, equipment planning, transportation and communications, the possibilities for future expansion, and the organization of its activities (drug distribution, manufacturing and packaging, drug information, teaching, and research). The various proposals are accompanied by architectural drawings, equipment lists, staffing estimates, and other practical aids. There is also a bibliography of 233 publications relevant to pharmacy design and planning.

0899 **WHO, Brazzaville.** *Health education in environmental health programmes: a guide for those engaged in environmental health programmes.* Brazzaville, WHO, 23 Apr 1975. 13p. WHO/AFR/HE/69. Engl.

Environmental health programmes can be successful only if the population actively participates in them; therefore, they must be founded on adequate health education policies. General objectives of these policies are to ensure that the community accepts new environmental measures, that the individual develops healthy personal habits, and that the community participates in planning and implementing programmes. Specific objectives can be formulated from information collected about the area and population to be served (sample survey is annexed to report). An analysis of this information should identify what the people know and feel about their health problems and what they do to solve them. These findings should then be incorporated into the plans to meet specific objectives, which can later be compared with the outcomes. Criteria for assessment will include changes in knowledge, attitudes, and practice; construction, use, and care of sanitary appliances; formation and functioning of committees and voluntary local contributions.

0900 **WHO, Brazzaville.** *Health progress in Africa, 1968-1973.* Brazzaville, WHO Afro Technical Papers No.6, 1973. 110p. Engl.

This paper reviews health progress during the period 1968-73 in the African Region and describes the health objectives for 1971-80. The five key areas are: (1) organization of community health services (including national health planning, local health services, maternal and child health care, nutrition, family planning, laboratory services, health education, data collection and analysis); (2) development of health manpower (including training programmes, staffing); (3) epidemiological surveillance and communicable diseases control; (4) environmental health (especially safe water supply and waste disposal); (5) regional research; and (6) regional service and support. The report contains several references, photographs, and statistical tables.

0901 **WHO, Brazzaville.** *Integrated concept of the public health services in the African Region.* Brazzaville, WHO Afro Technical Papers No.2, 1970. 108p. Engl.

In rural Africa there is a need for integration and rationalization of existing health services to ensure better utilization of the limited resources; the previously separate activities (curative medicine, preventive medicine, health education, sanitation, etc.) should be coordinated to form a comprehensive public health system. This compilation of papers discusses the roles and development of the individual components of such a system, with chapters covering the historical development of health services in this region; "basic health services" (particularly the activities of health centres serving the rural population); maternal and child health care; health education; medical care and rehabilitation; the roles of statistical, epidemiologic, and laboratory services; environmental health; national health planning; and coordination of different teaching activities.

0902 **WHO, Geneva. International Labour Organization, Geneva.** *Personal health care and social security: report of a joint ILO/WHO committee.* Geneva, WHO Technical Report Series No.480, 1971. 74p. Engl.

The problems and methods of coordinating social security schemes with public health services, especially in developing countries, are discussed. The separate histories of public health and social security agencies render coordination difficult, and the problem is compounded by the multiplicity of personal health services within developing countries (e.g., traditional medicine; military medical care; religion-sponsored medical care; public health programmes; and programmes of industrial, mining, and agricultural enterprises; etc.). The different patterns of organization and control of personal health services are explained, and the various relationships between social security and public health bodies, ranging from nonexistent through moderately to completely integrated, are examined. Means of financing these services are also discussed, and some considerations in the training of personnel for personal health care and administration are briefly mentioned. A list of conclusions and recommendations, in which the value of social security programmes for the delivery of personal health services is implicit, is drawn up to suggest ways in which maximum coordination between the two can be achieved.

0903 **WHO, Geneva.** *Methodology of planning an integrated health programme for rural areas: second report of the Expert Committee on Public Health Administration.* Geneva, WHO Technical Report Series No.83, Jun 1954. 46p. Engl.

The vehicle and nucleus of this integrated health programme is the rural health unit. It is defined as "an organization providing or making accessible, under the direct supervision of at least one physician, the basic health services for a community." These include maternal and child health, communicable disease control, environmental sanitation, maintenance of records for statistical purposes, health education of the public, public health nursing, and medical care. A WHO expert committee on public health administration aimed at determining the type of organization that could best serve as an effective unit and coordinator of subunits (such as health centres or mobile field units). They discussed the following topics: basic services for a rural health unit; its organization and its relation to intermediate and higher health authorities; personnel for local health work, and their training and utilization; the need for coordination between education and health authorities; the cost and financing of a local health programme; and the planning of integrated local health programmes. A description of an integrated health unit service, adopted by the Indonesian government for the Bandung Regency, is appended.

0904 **Zukin, P.** *Planning a health component for an economic development program.* American Journal of Public Health (New York), 61(9), Sep 1971, 1751-1759. Engl.

It is well documented that health problems can limit a country's potential for development since, for example, chronic disease and malnutrition reduce productivity of labour, and undernourished children do not learn normally. A development programme itself can also affect health by introducing urban migration, new occupational diseases, and other factors. Therefore, a comprehensive health component is essential to the overall economic development plan. In Malaysia, for example, programmes for the social, economic, health, and other sectors must meet basic criteria; these are judged against alternatives in terms of their anticipated contribution to the general policy objectives of the sector and of the country as a whole. If comprehensive planning is impossible, a selective "health support programme," designed to optimize the development effort, should be prepared. The author details the steps in systematic health planning, beginning with delineation of the health sector, including its health problems and available health services and facilities. Planning proceeds through the establishment of key policies and final objectives, determination of priorities, formulation of plans of action, cost-benefit analysis of the alternatives, implementation of a programme, and finally, the setting up of some means of monitoring progress. Although this methodology may be somewhat idealistic, it does provide a useful guide to the preferred approach.

II.4 Geographic distribution of health services

See also: 0762, 0768, 0879, 0890, 0970, 1015, 1056

0905 **Ahmad, I.** *Role of preventive and social medicine in the health of rural population.* The Medicus (Karachi), 40(1), Apr 1970, 37-42. Engl.

Preventive and social medicine in rural Pakistan is discussed generally, and areas for improvement are indicated. These areas include environmental sanitation, pure water supplies, control of communicable diseases,

maternal and child welfare services, educational facilities, and job opportunities. In addition, the author maintains that epidemiologic research centres should be set up at district level hospitals, their local branches, and rural health centres to investigate both apparent and nonapparent health problems through mass screening.

0906 Christian Medical Commission, World Council of Churches, Geneva. *Position paper on health care and justice.* Contact (Geneva), 16, Aug 1973, 1-6. Engl., Fren.

This paper points out the injustice in present hospital-based systems of health care: hospitals are doing more and more for the same limited number of people, instead of providing basic services to all. The author questions whether building bigger and better facilities to serve only the people who seek them out is just, since many more who are, perhaps, frightened away by the alienating atmosphere surrounding modern medical practice are neglected. The needs of the population must be recognized, and hospitals must start reaching out and enlisting community support toward the fulfillment of these needs. This will involve making facilities more accessible through decentralization; removing real or imagined barriers that frighten people away; and finding a financial equilibrium, i.e., one that provides inexpensive but good care and avoids the dehumanizing aspects of both expensive private care and free treatment.

0907 International Congress of Rural Medicine, Tokyo, Japan. *Whither rural medicine?* Tokyo, Japanese Association of Rural Medicine, 1970. 317p. Engl.

Proceedings of the Fourth Conference of the International Congress of Rural Medicine, Usuda, Japan, 30 Sep-4 Oct 1969.

See also entry 1311.

The Fourth International Congress of Rural Medicine examined four main themes: (1) toxicologic problems in agriculture, (2) ergonomic aspects in agriculture, (3) anthropozoonoses in agriculture, and (4) life in a rural community – its influences over its inhabitants' health. Under the first theme, different pesticides, their use by and effects on agricultural workers, are described. Under the second, studies on fatigue and performance, health problems due to vibrating machinery and those due to the agricultural practices, and prevalent accidents among farm machinery users are examined. The anthropozoonoses section of the proceedings includes descriptions of parasitic diseases and anthropozoonoses common to specific geographic areas; treatment and preventive measures for several are discussed. The final theme covers health services planning and implementation to meet rural needs.

0908 Navarro, V. *Underdevelopment of health or the health of underdevelopment: an analysis of the distribution of human health resources in Latin America.* Washington, D.C., Pan American Health Organization, 1973. 28p. PAHO/HR/CPP/D/34. Engl. 56 refs.

Pan American Conference on Health Manpower Planning, Ottawa, 10-14 Sep 1973.

The generally accepted definition of the development process, i.e., the diffusion of (1) entrepreneurial values, skills, and technology, and (2) capital from developed to developing countries, is challenged with particular reference to Latin America. Poor conditions exist in these countries, due not to a lack of cultural diffusion or capital but to a maldistribution of both. Maldistribution of human resources in the health sector is part of a general maldistribution whereby a developing country's resources are invested in providing the ruling minority with a lifestyle of amenities equal to (and based on the same values as) those of developed countries. Associated with this is a pattern of production and consumption aimed at providing maximum return on invested foreign capital rather than stimulating the equitable distribution of resources. Consequently, the benefits of development are flowing from the developing to the developed countries, and not vice versa. Statistical data on medical and public health expenditures in several Latin American countries are presented to support this thesis.

II.5 Financial aspects

See also: 0719, 0829, 0843, 0844, 0954, 0997, 1153, 1347, 1359

0909 Alexander, C.A., Parker, R.L., Shankaranarayana, B.S., Murthy, A.K. *Cost accounting of health centre expenditures.* Indian Journal of Medical Research (New Delhi), 60(12), 12 Dec 1972, 1849-1863. Engl. 10 refs.

A method for cost accounting of health centre expenditures is presented. This method is based on the determination of all expenses and an allocation of these to the different functions of the health centre (treatment, MCH, family planning, communicable disease control, and environmental sanitation). Expenditures thus allocated can be used to estimate the cost of various programmes as well as specific activities or services. Data from a study of primary health centres in Mysore and Punjab, India, illustrate the application of the method. The distributions of expenditures in these primary health centres and their subcentres, as well as costs of some specific services, are presented. The authors conclude that cost accounting of health centre expenditures is feasible and would be of practical value for health services administration, planning, and evaluation in India. (A step-by-step illustration of the methodology is appended to the paper.) (Revised author abstract.)

0910 Churches Medical Association of Zambia, Lusaka. *Churches Medical Association of Zambia.* Lusaka, Churches Medical Association of

Zambia, n.d. 5p. Engl.
Unpublished document.
The Churches Medical Association of Zambia was formed in 1970 as a collective voice through which church hospitals could negotiate staff increases and finances with the Zambian government. Since these hospitals are not allowed to accept fee-paying patients, they are forced to rely on government grants for the bulk of their income. The functions and organization of the association are described and interesting statistics on population, gross national product, medical personnel and facilities, government health organization, and types of staff and training output are cited.

II.6 Cultural aspects

See also: 0718, 0728, 0850, 0894, 1330

0911 **Chen, P.C.** *Unlicensed medical practice in West Malaysia.* Tropical Geographical Medicine (Haarlem), 23, Jun 1971, 173-183. Engl.
Unlicensed medical practice in West Malaysia is examined in the light of doctor scarcity, the nature and cultural bases of these practices, the dangers associated with them, and the patient's view of the relative place of each system. Unlicensed medical practitioners include: (1) traditional Malay medicine men; (2) traditional Chinese medicine men; (3) temple-keepers, spirit mediums, and roadside magicians; and (4) roadside drug peddlers and herbalists. The function of each is outlined. The efficiency of modern medicine, especially modern drugs, is increasingly being recognized by the people and the traditional practitioners. Antibiotics are being illegally prescribed, and dangerous results have proved that more effective drug control regulations are called for. The demand for modern scientific medicine can be expected to increase.

0912 **Dahlberg, K.** *Introducing present-day medicine into rural Southeast Asia.* Postgraduate Medicine (Minneapolis), 40, Dec 1966, A141-A145. Engl.
Cultural differences complicate the introduction of Western medical aid into rural South East Asia. Among the obstacles to immediate acceptance are lack of common terms of reference (medical concepts and terminology); local superstitions; practice of traditional methods, some of which harm the patient; and the Western doctor's initial inability to adapt to local conditions and languages. The successful programme, therefore, is usually led by a physician who relies on demonstration rather than theory (effective therapeutics also increase acceptance of ideas on preventive medicine) and who seeks reasons behind rejection of his suggestions and modifies his approach accordingly. He becomes proficient in the local language; and he is considerate of the patient's customs and beliefs (appointment of a local assistant helps). For those villages without a doctor a community medical supply programme could be run by a reliable and literate villager who, after completing an intensive 3-day course on elementary diagnosis and treatment, provides first aid and simple medicines.

0913 **Goodenough, W.H.** *Community response and development.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 225-240. Engl.
In this chapter on the response of rural communities to health care programmes, the author makes a plea for a more penetrating and systematic approach to understanding the local culture. Social and behavioural scientists can contribute to community medicine, but the scope of their present activities is too limited. They should provide a rigorous description of the community's culture to help account for past failings of medical programmes and to assist with the design and implementation of new ones. The author illustrates the type of progress that has been made in certain aspects of culture: study of the local language can improve the physician's understanding of his patients, and examination of the daily routine of villagers might reveal why more people do not use the health services. An understanding of the people's attitudes toward health and disease, their values, preferences, goals, and, in fact, all aspects of their culture can be used to advantage by health care planners and administrators. This understanding enables them to bring about changes in customs that will prove acceptable to the community – changes that have not been imposed from outside but that have evolved from within the framework of the community's own culture.

0914 **Gupta, J.P.** *Rural community public health and social research.* Licentiate (Ambala Cantt, India), 12(8), Nov 1962, 251-256. Engl.
The author proposes that a social worker be incorporated into the multidisciplinary health team, since a community's sociocultural characteristics (e.g., superstitions, modes of living, values, attitudes toward disease) strongly influence its public health. Social science research – the collection of demographic, economic, and cultural data – is therefore an important stage in solving a community's health problems. In India, where traditions and social structure are complex, this approach is especially appropriate. Some points to be kept in mind when analyzing the relationship between the rural society and its health problems are the importance of understanding the community as a whole, the role played by native practitioners, native concepts of health and disease, and the problems posed when a scientifically trained doctor comes to the village.

0915 **Lin, P.T.** *Medicine in China.* The Centre Magazine (Santa Barbara, Ca.), 7(3), May-Jun 1974, 13-21. Engl.
The author seeks an understanding of current "startling developments" in Chinese medicine and health by examining the dynamics of the fundamental social

change the country has undergone over the past two decades. Basic to this change was the mobilization of the people toward clearly defined, commonly accepted social goals. The overall guidelines for health policy laid down in 1950 at the First National Conference on Health were: that medicine should serve the majority of the population – the workers and peasants; that prevention should be given first priority; and that traditional Chinese medicine should be integrated with Western medicine. Since then, evolution of Chinese medicine and public health has resolved the major tensions (e.g., between Western and traditional Chinese medicine, between theory and practice in bringing medicine to the peasants and the workers, etc.). The characteristics of the health services since the Cultural Revolution (1966) include: a willingness on the part of doctors to live and work in the countryside; a change in the role of the hospitals, now engaged in the dual process of receiving patients and sending out medical teams; increased use of auxiliary health personnel; a reorientation of medical research from the treatment of rare, esoteric diseases to treatment of the more prevalent ones; a continued reliance on the masses to accomplish large tasks with meticulous care and thoroughness; and increasing synthesis of the two traditions (Western and Chinese) in practice. Finally, the incidence, origins, and treatment of mental disorders are discussed.

0916 **McGregor, D.** Christian Medical Commission, World Council of Churches, Geneva. *Traditional beliefs, health, and Christianity.* Contact (Geneva), 14, Apr 1973, 2-12. Engl.

The importance of understanding traditional culture as a comprehensive world view is emphasized. Christian beliefs can be incorporated into a traditional frame of reference so that the two coexist in a somewhat unorthodox, but not conflicting, way. For example, Christian converts often view sickness as being the result of sorcery or the work of lesser spirits, which God has allowed to afflict the victim because he is guilty of wrongdoing. To judge traditional beliefs as good, bad, or neutral undermines a people's world view. Although the author's first interest is the propagation of religion, he sensitively makes a point that could well be taken by those whose first interest is the propagation of health. With sufficient understanding on the part of the health propagator, perhaps conflict between the traditional and the scientific world view can be avoided. Examples cited are from Papua New Guinea.

0917 **Morse, J.W.** *Demography, feedback, and decision-making for economic and social development.* Milbank Memorial Fund Quarterly (New York), 42, Apr 1964, 301-327. Engl.

Social scientists, in general, agree on the need for an interdisciplinary approach to problems of economic and social development. Although the recognition of need exists, sociopsychological factors are still not fully considered in development processes. Institutions have not yet adjusted themselves to these needs. The government of Peru, however, through its National Fund for Public Health and Social Welfare (part of the Peruvian Ministry of Public Health and Social Assistance) has created a new Office of Social Development. This office is to serve a catalytic and interpretive function, linking leaders to public and private resources. Although the system has yet to be tested, social-scientific involvement in development should add considerably to solution of development problems. Examples of the theoretical basis for these assumptions are included in the discussion. Since this represents an interesting experiment in incorporating sociopsychological factors into work for development, the Peruvian Office of Social Development is worth noting in terms of its results. Comments and questions of conference-attendees are appended.

0918 **Soe, K.** *Medicinal plants of Burma.* Forward (Rangoon), 10(19), 15 May 1972, 17-19. Engl.

The majority of villagers in Burma depend largely on traditional medicines; these remedies, prepared from native plants, often prove effective, even when conventional modern methods fail. The plant resources are vast, and there is, therefore, considerable potential for more widespread application of such medicines in Burma and abroad. Working closely together, various scientific bodies (including the Burma Medical Research Institute, University of Burma Applied Research Unit, and the Burma pharmaceutical industry) are attempting to put Burmese medicine on a scientific basis by standardizing plants, materials, formulas, and therapy. In addition to a botanical survey and research into methods of cultivation and extraction, active ingredients are being analyzed to determine their chemical activity, pharmacological and clinical effects, and the feasibility of their commercial production. A successful indigenous drug industry would hopefully bring about important economic and social advances for the country as a whole.

0919 **Stubbins, J.** *Psychosocial services for the disabled in Peru as seen by a North American psychologist.* Rehabilitation Literature (Chicago), 28(5), May 1967, 139-144. Engl.

An American psychologist, invited to launch a rehabilitation training programme for psychologists and counsellors in Peru, comments on Peruvian attitudes toward mental problems. Among these is a growing realization of the need for rehabilitation services; in 1963 a decree was passed for establishing production centres to employ the handicapped and this was implemented in 1966. Most psychiatrists and psychologists (newcomers to the scene), however, are engaged in work with the mentally ill; rehabilitation is relegated to social workers, whose profession is plagued by low salaries, meagre status, and insecure job tenure. The interests of the handicapped are looked after by voluntary agencies and are generally custodial (as opposed to rehabilitative) in nature. The author realizes how much vocational rehabilitation is rooted in Anglo-American middle class values. Indeed, the idea of work as a means of personal fulfillment and social mobility is almost nonexistent in Peru and thus has not been exploited in rehabilitation. Attitudes are changing, however. Through

a sheltered workshop for upper-class mentally retarded children and adults, their families came to the realization that manual work, despite its low status, offered their children a more satisfying relationship with society than did custodial care. The author suggests that psychologists and psychiatrists in a developing country such as Peru would do well to explore this and other such opportunities for rehabilitation.

0920 **Weisz, J.R.** *East African medical attitudes.* Social Science and Medicine (Oxford), 6(3), Jun 1972, 323-335. Engl. 49 refs.

This overview of traditions combines findings from studies of 15 (African) tribal societies. An emphasis on supernatural causes of disease, a dependence upon witch doctors who utilize herbal and ritual remedies, and the use of surgical techniques were features common to most groups. Numerous health problems can be traced to traditional beliefs. Among them are dietary deficiencies, high infant mortality, and poor mental health. Proposals to incorporate the witch doctor into modern practice are discussed and considered unwise, although an analysis of herbal remedies is recommended, as is an emulation of the traditional emphasis upon social and emotional factors in illness. The need for widespread, innovative health education and for scientific measurement of its progress is stressed. (Modified journal abstract.)

II.7 Epidemiological, family planning, MCH, and nutritional studies

See also: 0763, 0774, 0896, 0907, 0972, 1027, 1049, 1111, 1241, 1246, 1270, 1324, 1327, 1393

0921 **Abalos, J.W.** *Educacion sanitaria y participacion de la comunidad en la erradicacion de la enfermedad de Chagas. (Health education and community participation in the eradication of Chagas' disease).* Revista de la Facultad de Ciencias Medicas de Cordoba (Bogota), 25, Jul-Sep 1967, 279-283. Span.

The fight against Chagas' disease in Argentina is based upon the elimination of the transmitter, *Triatoma infestans*. Although insecticide campaigns are conducted, sometimes with community support and sometimes under compulsion, to eliminate the insects from homes, success is limited because the area dealt with is so large and homes already treated are often reinfested from homes not yet treated, even before the campaign is over. The author concludes that elimination of the transmitter cannot be achieved without the cooperation of the inhabitants of infected areas. The situation calls for sanitary education as well as the use of insecticide.

0922 **Agrarwal, V.K.** *Preventive pediatrics in comprehensive health care.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 125-126. Engl.

To the author, child health means a complete service to the child "in sickness" and "in health." A child health programme should aim at enabling the child to reach adulthood in sound mental, physical, and emotional health. Preventive services in this programme must be designed to treat prevalent health problems, such as poor physical growth, retarded mental development, acute and chronic illness including malnutrition, functional disabilities of an emotional or social nature, or any other kind of distress. Preventive pediatrics, therefore, has five aspects: (1) promotion of general health, growth, development, and nutrition; (2) prevention of specific diseases (immunization); (3) early diagnosis and treatment of asymptomatic diseases; (4) early diagnosis and treatment of symptomatic diseases; and (5) prevention of unnecessary disability due to established symptomatic diseases. A pattern of service should be developed through which medical and nursing students can participate in the introduction of preventive measures along with curative services. To implement this, every hospital pediatric department should have a peripheral child health centre or clinic associated with it; students could then gain valuable practical experience at the community level.

0923 **Alderman, M.H., Levy, B., Husted, J., Searle, R.** *A young-child nutrition programme in rural Jamaica.* In McCormick, G., ed., CUSO Readings in Health, Ottawa, Canadian University Service Overseas, n.d., 53-55. Engl.
Appeared also in The Lancet (London), 1, 26 May 1973, 1166-1168. See also entry 788.

A programme to reduce the morbidity and mortality among young children in rural Jamaica has been developed. Locally recruited and trained health auxiliaries survey all children under five, diagnose malnutrition by application of anthropometric indices, and, according to a rigid protocol, treat the deficient children by education and demonstration at home. This economically feasible approach, relying entirely on local resources, has been followed for 2 years. The programme did not affect the prevalence of malnutrition but did reduce young-child mortality by half. (Author abstract.)

0924 **American Public Health Association, Committee on Research and Standards, Washington, D.C.** *Research problems in maternal and child health and child development.* American Journal of Public Health (New York), 45(4), Apr 1955, 506-508. Engl.

The results of a meeting of an ad hoc committee on research problems in maternal and child health and child development are presented. Research areas discussed were: studies of research methodology, longitudinal and cross-sectional studies of child growth and development, and administration studies to improve delivery of health care services. Research should be undertaken on methodology for diagnosing community problems, evaluating programmes, measuring the quality of work performed by professionals, measuring

children's health status, etc. Examples of topics included in the discussion of longitudinal and cross-sectional studies were the aetiology of congenital malformation; epidemiology of communicable diseases in groups of children (schools, day camps, etc.); epidemiology of accidents among mothers and children; studies on methods of accident prevention; and mental health implications. The discussion on administration studies covers clarification and delineation of functions of different professional disciplines working together (e.g., nurse, physician, social worker, nutritionist, and health educator); improving the techniques of staff training; coordinating health supervision more effectively; developing more efficient screening methods to detect health defects; and categorizing job duties as professional, subprofessional, and nonprofessional.

0925 **Berg, A., Muscat, R.** *Nutrition and development: the view of the planner.* American Journal of Clinical Nutrition (Bethesda, Md.), 25, Feb 1972, 186-209. Engl.

The author contends that insufficient status has been given to nutrition in national development planning and presents the case for nutrition as a precondition to the advancement of human performance. Different techniques used to measure the extent of malnutrition are described; in developing countries the size of the problem is indicated by the enormous child mortality directly or indirectly attributable to malnutrition. Less visible is the debilitating toll among the survivors: its effects on mental development, physical development, productivity, and "human capital" (returns on investment in health and education). Therefore, the costs of a nutrition programme should be weighed in relation to its benefits, including those benefits (such as social equality and emergence of leadership potential) that go beyond standard economics. An appendix lists data on child mortality and incidence of nutrition-related deaths for several countries.

0926 **Betham, M.T., Pula, N.I.** American Samoa, Health Education Curriculum Committee. *Health education curriculum guide: elementary and secondary.* Pago Pago, Health Education Curriculum Committee, 1973. 2v.(585p. total). Engl.

The school health programme in American Samoa comprises three major divisions: the school health medical service, school living and working conditions, and school health education. These two volumes are primarily concerned with the last, i.e., instruction of children in health matters. They provide examples of ways in which health activities can be integrated with other academic subjects and different teaching techniques that can be employed. A curriculum which is included, outlines the content and objectives of the different health topics for elementary and secondary levels of education, including personal health, nutrition, and use of medicines. The appendix contains a first aid chart suitable for use in schools, a guide for teachers in the detection of physical and emotional problems in children, and a series of record charts, standard letters, reports, etc. for monitoring a student's health status.

0927 **Brubaker, M.L., McCullough, J.C.** *Program for leprosy control in the Ryukyu Islands.* Public Health Reports (Washington, D.C.), 82(9), Sep 1967, 802-806. Engl.

A review of the current status of leprosy in the Ryukyu Islands reveals large numbers of patients with preventable disabilities and little change in the incidence rate since 1956. These are indications that present control methods are inadequate. An effective control programme requires early diagnosis so that spread of infection and development of disability can be minimized. Traditionally, leprosy control has been attempted by isolation of cases, but this practice has proven unsuccessful as the fear of being permanently institutionalized encourages people to conceal their disease. A programme has therefore been proposed to change patient, public, and professional attitudes toward leprosy and its management, and there is now a trend away from institutionalizing all patients, especially tuberculoid types. The programme recommends an initial survey of existing attitudes; seminars to inform and involve physicians and public health staff; use of mass communication methods for maximum impact on public attitudes; a school health education programme on leprosy to help eliminate the social stigma; training of public health staff in finding cases of leprosy; establishing outpatient clinics in all health centres; encouraging cooperation of patients by explaining the medical care available to them and the rewards of treatment; and decentralization of diagnostic, treatment, and rehabilitation services.

0928 **Choudhury, N.N.** *Community health activities.* Journal of the Indian Medical Association (Calcutta), 59, 16 Aug 1972, 158-159. Engl.

The author comments on the scope of community health activities and their priorities in India; he defines community health status "without undue emphasis on the health of individuals." But he points out that a healthy community is made up of healthy individuals and families and gives top priority to maternal and child health programmes incorporating population control, nutrition, and immunization services. Another priority is environmental sanitation, which deals with safe water supply, and disposal of human excreta, rubbish, and garbage, etc. But the success of all community health activities depends on adequate health education and active participation of the community. The author notes that the community's participation can be enlisted by local leaders and suggests that they should be invited to help in the planning.

0929 **Clarke, V. de V., Shiff, C.J.** *Assessment of results of experimental control programmes.* Central African Journal of Medicine (Salisbury, Rhodesia), Jul 1970, Suppl., 29-30. Engl.

Disease control in many parts of the world is not fully appreciated due to incomplete evaluations, which do not take all variables into consideration. For example, assessment of the effect of snail eradication programmes on the incidence of bilharzia is rendered difficult by human and parasitological factors including

population movements, sociological customs, the difficulty of obtaining comparable specimens, etc. The variables introduced by these factors make it difficult to draw reliable conclusions with current assessment methods. A snail eradication programme in the Norton-Selous Intensive Conservation Area, Rhodesia, achieved an excellent degree of snail eradication but showed little evidence of having altered disease prevalence. The responsible variable was found to be movement of people into uncontrolled areas and not inadequate control measures, as might first have been inferred. In the catchment area of Lake Kyle, where another snail eradication programme was carried out, population movement was not a factor and age-prevalence surveys reliably demonstrated an overall reduction of the disease in each age-group, plus a progressive absence of infection in the younger age-groups.

0930 **Cole-King, S.** *Role of health programmes in general national development: some thoughts on meeting maternal and child health needs based on experiences in Malawi.* In Second Conference for Coordinators of Church-Related Medical Work in Africa, Geneva, Christian Medical Commission, 1972, 16-25. Engl.

See entry 838 for complete proceedings.

In Malawi, the trend has been increasing toward community medicine and prevention. It is necessary for church-related medical missions to free themselves from traditional and conservative ideas that may not be applicable today. Ideas valuable for incorporation into church-related medical work include service evaluation and training and utilization of auxiliary health workers. The situation of the medical mission in Malawi is described.

0931 **Hellberg, J.H.** *Difficulties and possibilities of tuberculosis treatment in developing countries.* Scandinavian Journal of Respiratory Diseases (Copenhagen), 69, 1969, Suppl., 99-102. Engl.

Obstacles to the control of tuberculosis in developing countries are related to unplanned, uncoordinated activities aimed at meeting needs that have never been properly assessed. In some developing areas of India, the prevalence of tuberculosis is as high as 5 infected persons per 1 000 population. Treatment (via the general hospital or nonprofessional druggist-healers, etc.) is generally irregular and interrupted, resulting in drug resistance. Suggestions for optimum use of resources in the fight against tuberculosis include: treatment of the individual through the general hospital within the context of a comprehensive community health-care programme; concentration of limited resources on the younger population instead of the older tuberculosis patients; less expensive methods of case detection, such as sputum examination through a microscope rather than mass X-raying; administration of cheaper standard drugs given in two-drug regimens on a domiciliary basis; and more imaginative use of new categories of personnel, especially paramedical workers, in the diagnosis and treatment of the disease. Fundamental to the success of such measures is a centralized system of planning and control.

0932 **Jain, S.P.** *Programme planning, evaluation, and research.* Journal of Family Welfare (Bombay), 15(3), Mar 1969, 15-22. Engl.

This paper discusses methods and objectives of programme evaluation, with special reference to the family planning programme in India. The role of evaluation is not only to measure the outcome of a programme but also to monitor progress and indicate when modifications of the original programme are required. An evaluation system should be easy to administer and should not interfere with the basic work; it should be problem-oriented by concentrating on practical aspects rather than those of merely academic interest; there must be rapid feedback of progress and, where necessary, quick corrective action; experienced observers from both within and outside the programme should perform the evaluation. Progress can be assessed in different sectors, for instance, by geographical area, by sections of the population, by type of approach and technique, and by programme personnel and service at different levels: local, district, state, and national. When establishing baselines, particularly in a field such as family planning, an initial country-wide survey of knowledge, attitudes, and present practices may not be justifiable because it involves much work and reliable data are difficult to obtain. Instead, it is better to choose carefully designed local surveys in a few selected areas, repeating these during the programme, and to select items for evaluation that are directly related to the objectives of the programme.

0933 **Jelliffe, D.B., Jelliffe, E.F.** *Nutrition programs for preschool children.* American Journal of Clinical Nutrition (Bethesda, Md.), 25, Jun 1972, 595-605. Engl.

The magnitude and background of preschool malnutrition in developing countries are described and some principles from experimental child nutrition programmes are outlined. These principles show that a programme should be adapted to the region's ecology and be planned and undertaken in cooperation with the region's resources. The programme should be integrated with maternal and child health activities, form part of a cooperative ecological improvement effort, and be comprehensive in aim. Also discussed are the role, relative merits, and suggested modifications for hospitals, young child (under five) clinics, nutrition rehabilitation centres, supplementary feeding programmes for young children, applied nutrition programmes, day care centres/creches, and domiciliary outreach activities. Some recent developments are described including growth charts, pediatric weighing scales for use in the field, simple rapid techniques of immunization, anthropometric means of assessing the nutritional status of children when ages are not known exactly, simple means of rehydration (including the intraperitoneal route and the supervised oral approach),

and the use of a locally suitable vitamin-mineral supplement such as a folic acid-iron mixture rather than cod-liver oil.

0934 **Jelliffe, D.B.** USA, Agency for International Development, Department of State. *Child nutrition in developing countries.* Washington, D.C., U.S. Government Printing Office, 1969. 200p. Engl., Fren.
French version published by Regional Technical Aids Center, Paris.

This book is intended for Westerners who are working in various programmes in developing countries and who have had no previous training in the health field; it outlines certain general principles and suggests some guidelines for child nutrition. Its chapters treat the following subjects: the circumstances in developing countries that are largely responsible for malnutrition; diet, i.e., an outline of the basic nutrients, the types of nutrients required by humans, and their sources in tropical countries; food supply vs. population growth; custom and how it affects food consumption; childhood malnutrition, its symptoms, causes, and treatment. Additional information concerning dietary requirements, weight for age, sample weaning recipes from various parts of the world, recommended packed meals for schoolchildren, nutrition rehabilitation units, a home feeding kit, an attempt to combat protein calorie malnutrition in Eastern Uganda (the Mwanda project) by utilizing the resources of a district hospital, a district farm institute, and a primary school, is appended.

0935 **Jelliffe, D.B.** *Organization of MCH service in developing regions: (iv) hospital service for children.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 13, Mar 1967, 37-45. Engl.

In developing countries, every hospital must be concerned with more than just the daily therapy of the great numbers of sick children who attend; it should be a centre for the prevention of illness and the promotion of health, even if this can only be achieved at the expense of some aspects of curative work. The author describes the components of a hospital service for children – the outpatient clinics (the young child clinic and specialized referral clinics), the newborn service (including special care facilities), and the children's wards. Some considerations in the design of the last are noted, such as construction materials, layout, and equipment. The remainder of the article describes how the children's wards should be organized and managed to achieve maximum effectiveness from limited resources. This process involves measures such as adopting a nationalized drug policy; designing functional buildings that do not simply follow foreign traditions; and analyzing the types of disease and their required hospitalization to determine admission priorities.

0936 **Krishnakumar, S.S.** *Organization of massive vasectomy camps: a study of the Ernakulam experiment.* Journal of the Indian Medical Association (Calcutta), 59(8), 16 Oct 1972, 375-380. Engl.

Three family planning camps held in Ernakulam District of Kerala State, India, succeeded in changing that area's social norm in favour of family planning in general, and sterilization in particular. An intensive publicity campaign, enlisting the participation of local leadership, was begun 2 weeks prior to camp opening. It included educational meetings, house-to-house campaigns in rural areas, large-scale public meetings where previous acceptors were encouraged to speak, and marching demonstrations in favour of family planning. Incentives, in the form of money and a lottery, were made available to eligible acceptors. Although the campaign was government-instigated, much of the organization and publicity was carried out by volunteers. The Ernakulam experiment has shown that large masses of people can be motivated to accept family planning through an organized and concentrated effort, without awaiting the slower processes of economic and social development.

0937 **Letlhaku, L.L.** *Nutrition and child health at Kasangati health centre.* East African Medical Journal (Nairobi), 38(10), Oct 1961, 458-461. Engl.

When traditions are firmly established in the community, most illnesses arise from ignorance of cause, spread, and prevention of disease. Traditions surrounding the choice and preparation of food are probably a major cause of the high morbidity and mortality among children in East Africa. To displace harmful food practices, comprehensive education on child health and nutrition is called for, and a programme to achieve this has been implemented at Kasangati health centre (Uganda). This programme involves group work with families or with men's and women's groups, family health projects for medical students, operation of a child welfare clinic, and an education campaign using talks and films. It also ensures that every staff member at the health centre basically understands child health or nutrition, for the staff are the people to whom the patients will turn for explanations and advice.

0938 **Mawjood, A.A.** *Study of attitude of labourers toward birth control programme.* Iraqui Medical Journal (Baghdad), 21(2), Jul 1973, 58-61. Engl.

In Mosul (Iraq), 1 000 married men from factories were selected at random and asked to complete a questionnaire on their current practice and attitudes toward birth control. Of the 851 workers replying, 666 (78.2%) were not using any method of birth control for one or more of the following reasons: lack of knowledge (29.7%), health (33.8%), desire to increase the number of children (82.6%), and religious beliefs (84.9%). Only 185 (21.8%) were practicing birth control, their reasons being: concern for the health of the mother (83.2%), economic pressure (78.9%), and the desire to provide better care for children in a smaller family (51.3%).

0939 **Minkler, D.H.** *Changing maternal and child health in Uganda.* American Journal of Obstetrics and Gynecology (St. Louis), 113(4), 15 Jun 1972, 474-481. Engl. 10 refs.

The unmet demand for curative medical help in developing countries complicates the introduction of preventive health measures, the benefits of which are not immediately apparent. Nevertheless, there is the need to stress prevention along with cure, whenever possible, in order to lay foundations for long-term benefits in the health of the people. A physician participating in a preventive family care programme in Uganda describes, with some statistical data, the present poor state of maternal and child health and the potential rewards of preventive health measures. In this context, the changing attitudes toward family planning, sterilization, and abortion are also discussed.

0940 **Mofidi, C.M.** *Vector control in developing countries with special reference to the utilization of trained personnel after malaria eradication.* Teheran, Teheran University, Institute of Parasitology, Tropical Medicine, and Hygiene, 1963. 7p. Engl.

Appeared also in Vector Control, WHO, Geneva, 1963.

The author emphasizes that the importance of malaria eradication programmes lies not only in their effect on malaria itself but also in their tremendous impact on the entire health services of a country. The malaria eradication services provide a ready-made organization on to which other vector control activities and schemes for improved environmental sanitation can readily be grafted. Personnel involved in the operational aspects of malaria eradication should therefore be given suitable additional training so that they can be integrated into the vector control and environmental health services of the public health administration. Meanwhile, the epidemiological service of the malaria eradication programme can carry out epidemiological surveys on other disease vectors preparatory to a changeover to vector control. The trained personnel of the malaria eradication service will bring with them valuable skills and know-how, including experience of overcoming problems relating to human relations as well as those of a technical nature. (Author abstract.)

0941 **Morley, D.** Christian Medical Commission, World Council of Churches, Geneva. *Comprehensive care through the under-fives' clinic.* In Christian Medical Commission, Second Annual Meeting, Geneva, Christian Medical Commission, 1969, 39-46. Engl.

See entry 842 for complete proceedings. An expanded version of this paper has been published in Contact (Geneva), 18, Dec 1973, 3-27.

The under-fives' clinic (UFC) completely replaces both the welfare and the outpatient clinics for all children in this age category. It attempts to move away from the traditional approach and makes more efficient use of limited resources by offering comprehensive care – both curative and preventive – and an active health education programme. The UFC should be run in conjunction with an antenatal clinic and family planning service, and women should have access to all the services at every visit. Data from the original UFC in Western Nigeria illustrate the clinics' striking influence on child mortality. When guidance, leadership, and supervision of locally trained auxiliaries have been adequate, UFC's have been successfully established in several developing countries around the world. This document provides notes on the design of the clinic, its simplified record system (including a "road-to-health" chart held by the mother), consultation procedures, utilization of auxiliaries, health teaching, and some financial aspects. The most important procedural change is the increased role of the nurse (or medical assistant) in routine consultations; this enables the doctor to spend his time more profitably treating the small percentage of children who present serious illness or complications and also training and encouraging all levels of auxiliary staff who actually care for the majority of patients. The doctor must also pay particular attention to the children of the clinic staff, as their good health will provide a valuable example for the rest of the community. The nurse represents the key to the whole psychology of the clinic; because she comes from the same culture as the mother, the nurse is the best person to explain procedures and offer sympathetic advice. The strengthening of the mother-nurse relationship is crucial, and there must be sufficient consultation time to allow for contact and guidance; the continuity that results from a patient's seeing the same nurse on each visit will also increase effectiveness. The document outlines a step-by-step consultation plan for the nurse: what procedure to follow and how to elicit necessary information.

0942 **Morley, D.** *Under-fives' clinic.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.16. 13p. Engl.

See also entry 785.

The clinic at Ilesha, Western Nigeria, has three aims: (1) to supervise the health of all children up to 5 years of age; (2) to prevent malnutrition, malaria, measles, pertussis, tuberculosis, and smallpox; and (3) to provide simple treatment for diarrhea, pneumonia, and common skin conditions. Most causes of death among children in this region are preventable – health education, vaccinations, early diagnosis and treatment all provided by the clinic can reduce deaths in the first 5 years of life by half or more. Most of the work is routine and can be effectively conducted by nurses; continuity of a close mother-nurse relationship is particularly crucial to the success of the scheme. Many patients are brought to the clinic only when sick, and although the nurse can prescribe a limited number of medicines, she must also use this opportunity to promote preventive medicine with vaccinations, nutritional advice, malaria prophylaxis, etc. Details are provided of the organization of the clinic, its activities, and its construction and layout.

0943 **Mukerje, M.** *Preventive obstetrics.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 127-128. Engl.

The high incidence of mortality and morbidity associated with pregnancy in India can be attributed to: poverty and inadequate nutrition (resulting in severe anaemia, osteomalacia, and toxaemia); meagre facilities for proper antenatal and perinatal care; and the general ignorance of the people with regards to pregnancy. Suggestions for improving the situation are: (1) prevention, early detection, and proper treatment of complications by regular antenatal checkups (the author briefly outlines the roles of rural midwife, the health centre, and the district hospital in this respect); (2) provision of adequate diet to prevent anaemia in pregnancy; (3) detection and treatment of hookworm infection in rural areas; and (4) widespread health education, including mothercraft classes, maternal and child welfare, and family planning advice.

0944 **National Family Planning Board, Kuala Lumpur.** *How to establish a new clinic and in a new area.* Kuala Lumpur, National Family Planning Board, Prime Minister's Department, n.d. 7p. Engl.

This document from the National Family Planning Board in Malaysia provides recommendations and guidelines for establishing a family planning clinic. The factors determining choice of location, the preferred clinic design, and the necessary staff, transportation, drugs, and equipment are discussed. There is also a list of the duties and responsibilities of family planning nurses and workers and a statement of the need for tact and understanding in family planning.

0945 **National Institute of Nutrition, Bogota.** *Practical guide to combating malnutrition in the preschool child: nutritional rehabilitation through maternal education.* New York, Appleton-Century-Crofts, Educational Division, 1971. 74p. Engl.

This book, whose text was drafted at a working conference held at the National Institute of Nutrition, Bogota, Colombia, in 1969, is intended as a practical guide for organizations and individuals involved with the problem of malnutrition. The authors are 23 scientists, physicians, nutritionists, and activists who have been associated with work in nutritional rehabilitation or mothercraft centres. The papers are built on one concept: education of mothers in child care by involving them in the nutritional rehabilitation of their own children, using food, facilities, and methods that are within their financial means and their ability to comprehend. Emanating from this concept are staffing needs and locations of centres. Also discussed are the questions of admission, follow-up, and treatment evaluation. Nine appendices provide related charts and statistics.

0946 **Oxfam Project, Oxford.** *Lusaka Nutrition Group.* In McCormick, G., ed., CUSO Readings in Health, Ottawa, Canadian University Service Overseas, n.d., 56-57. Engl.
See also entry 788.

The Lusaka Nutrition Group is responsible for implementing the National Freedom from Hunger Campaign in the Lusaka area of Zambia. Four of every 10 Zambian children die before age 5 from malnutrition or related diseases. Indeed, in one town, 85% of the children 9-11 months old showed signs of it. The problem is not always lack of food; it is often lack of knowledge about what to do with it. People do not understand that food intake relates to body growth and that different foods are of different value to the body. The group's objectives are to provide essential and nutritious foods at reasonable prices and to educate people in proper eating habits. Protein-rich foods, such as groundnuts, dried fish, and brans, are bought cooperatively and distributed at lowered prices in over 200 food centres; teaching activities include lectures on nutrition, slide shows, leaflet distribution, cooking demonstrations, school conferences, and interviews with individual mothers. Future plans include an agricultural training centre, whose 2-year course for 20 students will lead to the establishment of "model" farms in surrounding townships.

0947 **Oxfam Project, Oxford.** *Maternal and child health and family planning programme, La Paz and Montero: Methodist.* In McCormick, G.,ed., CUSO Readings in Health, Ottawa, Canadian University Service Overseas, n.d., 115-117. Engl.
See also entry 788.

This paper outlines the geographic, demographic, social, economic, and health conditions in Bolivia and describes the activities of the Medical Work Committee of the Methodist Church in that country. This group plans to integrate maternal and child health and family planning into its existing medical and community health services. Included with the programme will be practical courses in public health, preventive medicine, and family planning for medical students, doctors, and nurses. Statistical data relevant to maternal and child morbidity and mortality, attitudes to different methods of birth control, and general evaluation of the programme will be collected. The programme's organization and budget are included.

0948 **Rajagopalan, S., Shiffman, M.A.** WHO, Geneva. *Guide to simple sanitary measures for the control of enteric diseases.* Geneva, WHO, 1974. 103p. WHO/ISBN 92/4/154047/8. Engl. 25 refs.

This guide, a detailed compendium of simple measures to control the high incidence of enteric disease associated with poor sanitary conditions, is intended for use by professional personnel responsible for public health and sanitary services in developing countries. The introduction discusses enteric disease transmission, short-term emergency control measures, and the objectives and limitations of this guide. The chapters treat the following topics: organizational and operational needs; urban and rural water supply systems, including the purification of water; waste collection and disposal;

institutional and camp sanitation; training of personnel; and action in an emergency. Additional appended information includes: medical considerations for utility operations and food handlers, public involvement and participation, tests for residual levels of chlorine, the amount of chemicals needed to disinfect water for drinking, important characteristics of some selected food-borne diseases, specimen forms for the investigation and reporting of food-borne disease outbreaks, and curricula for a training programme.

0949 **Rizzuti, A.B.** *Planning a film library for information on the prevention of blindness.* Israel Journal of Medical Science (Jerusalem), 8(8-9), Aug-Sep 1972, 1097. Engl.

General lack of knowledge about blindness and its causes, especially in developing countries, contributes substantially to its occurrence. One effective means of overcoming this is the distribution of films about common ocular conditions that lead to blindness, especially keratomalacia, onchocerciasis, amblyopia, glaucoma, and cataracts. A limited number of films on these subjects are available from the Society for Prevention of Blindness, New York; the Eye Bank Association of America (Manhattan Eye and Ear Hospital, New York); and the International Film Library, New York. It would be extremely useful if groups who are engaged in prevention of blindness were to produce more films at different levels of sophistication.

0950 **Singleton, W.T., Whitfield, D.** *Organization and conduct of a World Health Organization inter-regional course on ergonomics for developing countries.* Human Factors (New York), 10(6), Dec 1968, 633-640. Engl.

The objectives, structure, and organization of a course in ergonomics for representatives of occupational health services in developing countries are described. The relevance of ergonomics to developing countries is discussed and is reflected in the three sections of the course: anatomical and physiological aspects of work, psychological aspects, and techniques used in human factors studies. A set of recommendations for the future of ergonomics in developing countries was adopted by the course participants and is reproduced in full. (Revised author abstract.)

0951 **Sodhy, J.S.** *Priorities in a modern tuberculosis program in developing countries.* Medical Journal of Malaya (Singapore), 24(3), Mar 1970, 171-175. Engl.

A tuberculosis programme must make minimal demands on a nation's resources and yet produce maximum epidemiologic impact. The basic objectives are to protect at least three-quarters of the eligible population with BCG vaccination, to identify two-thirds of the infectious cases in the country, and to render at least 95% of these noninfectious by adequate treatment. The programme can achieve these basic objectives only if it is able to reach the entire population through an efficient network of primary health centres; therefore correction of the disparity between urban and rural health services must be the highest priority. Simplified, standardized techniques can be applied by trained technicians and paramedical personnel working under periodic professional supervision, and the desired BCG coverage can be obtained by vaccinating all persons under 20 years of age. Sputum produced by persons suffering from a cough of more than 2 weeks duration should be stained and microscopically examined to identify infectious cases. Trained nurses and technicians can administer the standard drug treatment en masse at the health centre; self-administration cannot be relied upon. Finally, community participation is vital to the programme, and rallying widespread public support and involvement must be a primary concern.

0952 **Sundarsanam, S.S.** *Applied nutrition programme in Madras State.* Indian Journal of Public Health (Calcutta), 13(2), Apr 1969, 83-85. Engl.

In India, the applied nutrition programme (ANP) operates in selected community development blocks to encourage production of food such as vegetables, fruit, eggs, fish, and milk. It enlists members of the local community and promotes the proper distribution of this food to vulnerable groups (pregnant and nursing women, preschool children). Financial and technical assistance comes from local, national, and foreign sources, including UNICEF, FAO, and WHO. Each ANP block is associated with a teaching institution, and the training and education aspects are emphasized throughout. Local ANP staff may provide financial and technical guidance to the village organizations, but the programme should be firmly established and self-generating at the end of 5 years. At this time, the villagers should assume complete control. As there are many organizations involved at different levels, committees have been established to coordinate activities and review progress. The author observes that this is an ambitious programme, the success of which depends on the cooperation of all participants; he stresses that actively involved mothers and school teachers can play particularly important roles.

0953 **Taba, A.H.** *Nutritional problems in the weaning period (report on a seminar in Addis Ababa, Ethiopia, 3-15 Mar 1969).* Journal of Tropical Pediatrics (London), 16(4), Dec 1970, 211-248. Engl.

The need for families to learn to distribute food adequately among their members (especially to children) emerged repeatedly in this summary of a conference on nutrition in the weaning period. At present in the Eastern Mediterranean Region, the lack of suitable weaning foods and poor feeding habits combine to leave 60-80% of children (under 4 years) malnourished. The consequences – high mortality and low intelligence – are apparent. Reports from Kenya, Tanzania, Uganda, Kuwait, Pakistan, Ethiopia, Iran, Iraq, Jordan, Somalia, Sudan, Tunisia, and the United Arab Republic are summarized. All these (except Kuwait, which reported few problems) emphasized the need to encourage prolonged breast feeding in urban areas. Comparison of the reports was impossible due to lack of standardized

data, which promoted a seminar recommendation that institutes be established in all countries to record vital statistics. Biological and clinical screening for malnutrition were briefly reviewed, and steps to follow before the introduction on the market of supplementary foods were outlined. A list of participants and the recommendations of a working group are appended.

0954 Taylor, H.C., Berelson, B. *Comprehensive family planning based on maternal/child health services: a feasibility study for a world program.* Studies in Family Planning (New York), 2(2), Feb 1971, 23-54. Engl.

The magnitude of the population problem in developing countries is discussed and two simple models (one urban, one rural) to meet the maternal and child health and family planning needs are devised. The models are applied in theory to several developing countries, and the capital and maintenance costs required to transform available health services into operational models are estimated. Each model aims at reaching the pregnant woman when she comes in contact with the health service before, during, and after delivery. The rural model is made up of a system of maternity/family planning units and substations responsible for the maternal welfare and family planning needs of populations of 100 000 and 4 000 respectively. Existing health services and demography in Colombia, India (the Punjab and Orissa only), Indonesia (three areas, about 13% of the population), the Philippines (26% of the population), Thailand, Iran, Turkey, Kenya, and Ghana are statistically represented. Facilities and personnel needed to implement these models, their costs, and estimated impact on health and demography are set forth in figures and tables. Questionnaires used in the study and the hypothetical illustration of demographic impact of a postpartum programme are appended.

0955 Technical Group Meeting on Malnutrition and Gastroenteritis, St. Vincent. *Strategy and plan of action to combat gastroenteritis and malnutrition in children under two years of age.* St. Vincent, Ministry of Health, 1974. 38p. Engl. 10 refs.

Specific goals in terms of a percentage reduction in infant mortality and morbidity due to gastroenteritis and malnutrition were set as a result of the Fifth Caribbean Health Ministers Conference, held in February 1973. The means to achieve these goals are outlined within this plan of action. Recommendations are in the following areas: environmental health services, maternal and child health services, management and follow-up of gastroenteritis and malnutrition; data necessary for implementation; health education, nutrition, education, and consumer education; economic and agricultural measures; sociocultural aspects; legislation concerning misleading advertising; immunization as a prerequisite to school entry; establishment of standards and regular inspection of orphanages, day care centres, nurseries, etc. Some observations on this plan and its implementation are also given.

0956 Thompson, W.S., Lewis, D.T. *Problemas de poblacion. (Population problems).* Mexico, D.F., Medica Mexicana, 1965. 535p. Span.

This textbook is intended to provide university undergraduates with an introduction to the study of population. The first part of the book serves as a general introduction and includes a discussion of Malthusian and other theories of population dynamics. The second section is concerned with the composition of a population, such as rural/urban distribution, religious and ethnic components, and analysis according to age, sex, income, education. The third part describes the major influences on population size – measures of fertility, factors affecting birth rate, mortality, etc. The different patterns of population growth throughout the world and some population policies are reviewed in sections four and five. It is hoped that through this book the student will acquire a basic understanding of the variables affecting population and will become familiar with elementary techniques for collection, statistical treatment, and analysis of population data.

0957 Turner, C.E. *Planning for health education in schools.* London, Longmans, Green, and Co., 1966. 157p. Engl. 14 refs.

This framework of health education from primary school to teacher training levels provides an extensive list of possibilities from which national, regional, and local authorities may choose when planning programmes. These possibilities are presented as topics of particular importance or interest to the student at the different periods of his development. It is pointed out that health education programmes throughout the world are provided or influenced through healthful school living, school health services, and school, home, and community relationships as well as health instruction; attention to these three aspects is especially recommended in teacher-training programmes. The following topics are discussed in three appendices: desirable learning experiences in health, a programme of health education in rural primary schools, and topics presented in teacher-training courses dealing with health education and the school health curriculum.

0958 United Nations Economic and Social Office in Beirut, Beirut. *UNFPA technical assistance to countries of the Middle East.* Population Bulletin of the United Nations Economic and Social Office in Beirut (Beirut), 5, Jul 1973, 1-13. Engl.

In 1967, the secretary-general of the United Nations created a trust fund to finance an expanded work programme in the field of population. In May 1969, the secretary-general requested the administrator of the United Nations Development Programme (UNDP) to assume the responsibility for administration and management of the fund, which was renamed the United Nations Fund for Population Activities (UNFPA). The aims and purposes of the population fund are: (1) to assist in promoting awareness of the social and economic implications of population problems and their possible solutions; (2) to extend systematic and sustained assistance to developing countries in solving

their population problems; (3) to extend the capabilities of the relevant organizations of the United Nations system so that they can provide suitable assistance to countries in planning, programming, and implementing population projects; and (4) to provide the leadership for expanded population activities within the United Nations system and to coordinate the programming, planning, and implementation of projects supported by UNFPA. The organization of the fund, its methods of work, and a brief description of various projects in the Middle East are provided.

0959 **Wardekar, R.V.** *Leprosy problem - future programme - assessment.* Indian Journal of Public Health (Calcutta), 13(2), Apr 1969, 79-80. Engl.

To cope with the enormous number of leprosy cases in India, the government has established leprosy control units and surveillance, education, and treatment (SET) centres, the latter located mainly in rural areas. A government-appointed committee has prepared an operational guide and an assessment scheme for leprosy work. Three levels of assessment are suggested: improvements in the individual patient, in a specified study area, and in the general trend based on prevalence and incidence rates. However, the campaign to control the disease faces difficulties caused by lack of organization, funds, supervision, and qualified manpower. Recommendations, therefore, include central sponsorship, increased use of specially trained paramedical workers, intensified health education, greater involvement of medical colleges in leprosy treatment, refresher courses, and a rehabilitation programme.

0960 **Wessel-Aas, T.** *Practical aspects of work on tuberculosis in South Korea.* Scandinavian Journal of Respiratory Diseases (Copenhagen), 65, 1968, Suppl., 73-79. Engl.

The problem of discovering and treating tuberculosis in a developing country, i.e., Korea, where it is estimated that 5% of the population suffer from active pulmonary tuberculosis, cannot be attacked in the same manner as in a developed country. Mass examination by X-ray and tuberculin test is unrealistic on a nationwide scale because of an inadequate drug supply to treat all cases. Similarly, in an area of high-prevalence, contact investigation is useless, as the entire population runs about the same risk of coming into contact with an infected person. Examination of groups aged 6–26 revealed that people between the ages of 18 and 26 ran the highest risk of having pulmonary tuberculosis. On the basis of these data, it was concluded that limited resources could best be applied to the investigation and treatment of this age-group, and to widespread BCG-vaccination of the earlier age-groups, until the country has the resources to extend coverage to the entire population.

0961 **WHO, Geneva.** *Family planning in health services: report of a WHO expert committee.* Geneva, WHO Technical Report Series No.476, 1971. 65p. Engl.

This report is concerned with the principles and processes involved in the planning, administration, organization, operation, and evaluation of family planning programmes within the overall health care system. It considers the implications for health services of various objectives of family planning and the related legislation. Assessment of needs and resources is described, this being a prerequisite for establishing objectives, determining priorities, and developing strategies. Under the heading of implementation, there is a discussion of the introduction and integration of family planning activities into the health services, the organizational structure and administrative aspects involved, factors affecting utilization of services, and the education and training of health personnel. Another section describes a scheme and methodology for evaluating the family planning programme, with a note on cost analysis. The committee concludes that some family planning activities can be introduced into available health services, but they specify areas where additional research should be undertaken.

0962 **WHO, Geneva.** *Maternal and child health in the USSR: report prepared by the participants in a study tour organized by the World Health Organization.* Geneva, WHO Public Health Papers No.11, 1962. 74p. Engl.
See also entry 812.

Specialists in maternal and child health (MCH) from 17 countries report on the principles, structure, organization, history, and personnel of MCH services in the USSR. In the ministries and oblasts, a chief medical officer of MCH is assisted by a gynaecologist and a pediatrician; at lower levels the two programmes have been almost totally severed. In the city, women's advisory clinics provide prenatal care while maternity homes provide inpatient care for normal deliveries, abnormal pregnancies, and gynaecological operations. The district pediatrician and nurse are responsible for the child's health needs to age 14-18; inpatient care is provided by children's polyclinics. Sanatoria, owned by trade unions, act as havens for convalescing children or pregnant women who need to relax. All health services, with the exception of stays in the sanatoria, are free to everyone. In rural areas, the same basic plan exists, but feldshers and midwives provide many of the services. The legislation that has brought about the present level of care is discussed briefly. Breast feeding up to 9 months is encouraged in the laws, and human milk banks store supplements for premature and sick babies. Additional nutrition programmes fall under the auspices of the Department of Epidemiology and Sanitation, which works closely with MCH. Morbidity and mortality figures, characterized as low, are presented. Finally, health education in schools and education and training programmes for MCH personnel are discussed.

0963 **Wilson, R.G., Halstead, S.B., Jatanasen, S.** *Epidemiology and health in Thailand.* Journal of the Medical Association of Thailand (Bangkok), 55(12), Dec 1972, 715-725. Engl. 13 refs.

Infectious diseases have been the leading causes of morbidity and mortality throughout the history of public health in Thailand. Recent data indicate that seven of the 10 leading causes of death are infectious in origin. These data include only the defined causes of mortality; over one-half of the deaths occur from undefined causes. The present doctor-to-patient ratio is 1:1 000 for the Bangkok-Thonburi municipal area, and 1:12 000 for the rest of the country. At the present rate of physician production, it is estimated that it would take 100 years to reach an optimum doctor-to-patient ratio of 1:1 000 throughout the country. Thus, the Ministry of Health has no choice but to attempt to prevent infectious disease through the most effective means available – the specialized national control programme. Since the success of the control programme depends on sufficient epidemiological data, concepts central to epidemiology and the application of epidemiological data have been outlined in detail. In the future, it is hoped that the practice of curative and preventive medicine will be decentralized, along the lines of the American Centre for Disease Control. Present conditions, however, make a strong national epidemiology service crucial to disease control in Thailand.

Omana Prato, health auxiliary, on a home visit to Pendare Village, near Pto. Ayacucho, Venezuela

III. Primary Health Care – Implementation

III.1 Rural inpatient care

See also: 0822, 0935, 0994, 1011, 1046

0964 **Allman, M.M.** *Rural health in India: a visit to a remote health centre.* International Nursing Review (Geneva), 14(4), Jul-Aug 1967, 45-49. Engl.

An American professor of nursing comments on the structure and activities of a rural health centre in northern India. This particular centre was staffed by two doctors (a young husband and wife team), contained inpatient facilities for six, and served an area of 150 square miles with a population of 70 000. Three one-room rural stations, located in remote villages and manned by a health visitor/midwife, a compounder, and a sanitarian, treat minor illnesses and refer more serious ones to the centre. The health visitor conducts classes in scientific midwifery for the traditional birth attendants (dais) who assist most deliveries. Most of the diseases encountered in the health centre – gastroenteritis, anaemia, eye infections, tuberculosis, and malnutrition – are treated through curative medicine and represent no great challenge for the health personnel. Facilities for extensive surgery do not exist. The author comments that the medical personnel seem well prepared for rural work. Both the doctors and the health visitor, however, look forward to pursuing their careers in a more stimulating, i.e., urban, environment.

0965 **Bodenstein, J.W.** *Africanization in mission hospitals.* Contact (Geneva), 21, Jun 1974, 4-10. Engl.

The doubts in the minds of medical missionaries in the Bantustan homelands of South Africa concerning the future need for their services are acknowledged. The author believes that the quality, extent, and continuity of their involvement will be determined by their attitude toward community development, the aspirations of the people, and personal adjustment to the changing situation. He elaborates by describing how the activities of the missionary in the colonial era were determined by the "agents" rather than the "target," whereas today the "target" group is demanding a part in its own development. With this transition to a "client" community, the relationship with the missionary agent has changed, and the underlying philosophy for the missionary should be cooperation rather than imposition. And, although not specifically trained as community developers, missionary doctors and nurses must undertake this role – it is the key to their continued involvement in the development of health services in the "homelands."

0966 **Church, D.** *Architecture of hospitals and health centres.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.10. 13p. Engl.
See also entry 785.

The author urges that whenever hospital building or enlargement is considered, an experienced architect be contracted to draw out a "master development plan"; this ensures essential features are not omitted. It is important to leave space for future expansion and to adapt the structure to human needs, for example, by incorporating a hostel for relatives. There should be a closely integrated nucleus of important departments (wards, outpatient, laboratory, office, operating theatre, records), surrounded by a shell of lesser buildings (e.g., residential). One- or two-storey buildings are preferred, with a simple ramp substituting for a lift. Costs can be reduced by making extensive use of cheap materials for all but the theatre and intensive care unit, thus releasing capital for more staff. Windowed, mud-wattle-whitewash buildings roofed with corrugated sheeting are perfectly satisfactory, provided they are well planned, properly constructed, and well maintained. Prefabrication is more convenient but less economical and should be reserved for emergencies or where local building materials are not available. Another practical innovation for certain climates is the use of solar energy to generate a hot water supply – in Kenya such a unit can pay for itself within 2 years. Finally, when the choice lies between no building or having one that suffices, the rural doctor is encouraged to organize the community into erecting its own hostels, shelters, and minor clinics; information on design, methods, and manuals for such projects is presented in the article.

0967 **Church, R.** *Voluntary nursing in the Yemen.* Nursing Times (London), 69(18), 3 May 1973, 578-580. Engl.

The experiences of five British nurse volunteers working in the Yemen Arab Republic as part of the Catholic Institute for International Relations (CIIR) volunteer programme are recounted. The Yemen population whom they served is essentially rural and suffers from

conditions similar to those in other developing countries, i.e., malnutrition, intestinal parasites, enteritis, malaria, bilharzia, and tuberculosis. The infant mortality is 40-60%. There are about 30 hospitals and 100 dispensaries; the doctor-to-population ratio is 1:35 000. In general, the women found that basic nursing care (including prenatal and maternity services) is lacking and that hospital personnel have little idea of sterile techniques. These problems are targets for the CIIR; it is trying to recruit more nurses, midwives, health visitors, and doctors as medical volunteers. A return air fare, a house plus living expenses, and a personal allowance are being offered by the British volunteer programme. Information can be obtained from: Robert Church, CIIR Overseas Volunteers, 41 Holland Park, London W11, telephone 01-727-3195.

0968 **Cutting, W.A.** *Every child's birthright.* Saving Health (London), 10(3), Sep 1971, 52-54. Engl.

To reduce malnutrition and promote better health habits in children of Jammalamadugu, India, the local hospital has established a nutrition education unit and an under-fives' clinic. The nutrition teaching is based on the findings of a survey of the area's living and eating habits. It is parent-oriented, i.e., mothers and grandmothers are taught how to return malnourished children to health by feeding them locally available foods. Through the under-fives' clinic, parents are advised on immunization, correct feeding, and simple management of common illnesses. Parents are also given a modified version of an internationally accepted weight chart for each of their children. This chart, which has been translated into the local language (Telugu), is illustrated with pictures of South Indian foods suitable for a child's diet. It also contains a section in which parental attitudes and actions regarding family planning can be noted. Other activities briefly referred to in the paper are the introduction of a mobile maternal and child health clinic, and the training of health workers at the village level.

0969 **Eaves, S.W., Pollock, J.R.** *Intermediate techniques: designs and techniques from Intermediate Technology Workshops, Zaria.* Zaria, Nigeria, Intermediate Technology Workshops, Ministry of Trade, Industry, and Cooperatives, North Central State Government, n.d. 23p. Engl.

This booklet contains a selection of designs for clinical and hospital furnishings developed at workshops in Ibadan and Zaria (Nigeria) and at the Intermediate Technology Workshop in Zaria. It is meant to suggest simple, adequate, and inexpensive solutions to certain specialized construction needs encountered in designing health centre equipment. Illustrated instructions for the construction of a bedside locker and table, ward trolley, bush wheelchair, hospital screen, bicycle ambulance, artificial leg, premature baby incubator, hospital water still, transfusion stand, and many other items are included.

0970 **Faria, H.V.** Venezuela, Ministry of Health and Social Welfare. *Hospital Chiquinquira: programa funcional. (Chiquinquira Hospital: functional programme).* Caracas, Ministry of Health and Social Welfare, Jun 1973. 107p. Span.

Although the main emphasis of this paper is on the reorganization of the Chiquinquira Hospital, Venezuela, a chart describing the health organization of Zulia State is of particular interest to those concerned with rural health care. This chart shows a state divided into 10 health districts administratively dependent on eight hospitals. Some of the health districts are responsible for a varying number of the 44 rural health centres throughout the state. In turn, the rural health centres supervise the functions of 63 rural dispensaries or health posts. In Maracaibo (state capital) there are eight hospitals controlling five rural health centres and one rural health post. Services for ambulatory patients at Chiquinquira Hospital appear prominently in the programme of the new hospital. The document shows calculations for numbers of outside patients to be visited on a monthly and yearly basis.

0971 **Forbes, C.** *Interim report on Kirathemo Child Health Clinic.* Nairobi, University of Nairobi, Department of Pediatrics, 1972. 7p. Engl.
Unpublished document.

Minor conditions requiring medical attention often hinder recovery from malnutrition. Realizing this, the Kirathemo Child Health Clinic, which has been successfully involved in nutritional rehabilitation and education, approached the Department of Pediatrics, University of Nairobi, Nairobi, Kenya, for help. The department arranged for one doctor and three medical students to attend the clinic each week. This help expanded the clinic's functions and made the child care comprehensive. The most common medical problems, the drugs for treating them, and the regular vaccines used in the clinic are listed. The clinic now offers the following services: documentation and weighing; history-taking and physical examination; treatment of minor illnesses; early recognition and treatment of major illnesses; prescription of a limited number of drugs; identification of children "at risk"; immunization; health and nutrition education; protein supplementation; family planning; child health team training; follow-up and referral; and promotion of community involvement. Results of the programme have been encouraging; about 50 children, the majority underweight, visit the clinic per week. Also, student participants appreciate the learning opportunity the clinic has given them. The article discusses some problems, especially in community participation and education, whose solution could further improve the programme.

0972 **Forbes, C.** *Gatundu children's clinic.* Nairobi, University of Nairobi, Department of Pediatrics, n.d. 7p. Engl.
Unpublished document.

This is a report on the operation of the Gatundu children's clinic, one of the comprehensive child health clinics in Kenya. Its objectives, problems, patient-flow-charts, services, and proposed changes are described.

Included are two sample "Cliniki Ya Watoto (under-five) Symptom Management Flow Charts," which are used by auxiliary personnel in dealing with new patients. In a letter to the Kenyan Ministry of Health prefacing the article, Professor Forbes cites very impressive reductions in child mortality and increases in child immunizations. He strongly recommends that this approach be adopted in all child-care units throughout Kenya.

0973 **Graham, J.D.** *Up-country medical practice in Kenya.* Canadian Medical Association Journal (Toronto), 99, 17 Aug 1968, 309-313. Engl.

Health services in Kenya are made up of government dispensaries and health centres in rural areas, district hospitals located in all the major towns, and hospitals run by religious groups. The Chogoria Hospital, located in a rural mountainous district, is one sponsored by a religious sect; it offers curative and preventive services to the local population and functions as a training centre for nurses and dressers. A 3-year course offered by the hospital comprises practical ward experience and lectures in nursing, hygiene, medicine, surgery, and basic science. Upon completion of the course, most students seek further training as midwives, laboratory technicians, or registered nurses. The trained dressers, who staff the rural dispensaries and do most of the hospital work, are the family doctors to most rural Kenyans; in Chogoria Hospital their duties include simple suturing, uncomplicated skin grafts, and circumcisions, as well as the administration of all anaesthesia. Trained indigenous midwives at Chogoria handle normal deliveries (about 100 per month) in the obstetric unit, and the doctor is called in for breech cases, twins, and difficult births. The author comments that although Kenya's health situation, manpower, and health manpower training facilities are improving, complementary development in the agricultural, industrial, and communication sectors is needed.

0974 **Hill, G.J., Herrera-Acena, M.G., Arboleda, G., Montoya, R.** *Surgical education in a developing country: participation of a rural community hospital in Colombia.* Archives of Surgery (Chicago), 106, Mar 1973, 356-358. Engl.

In 1968, the Health Department of Antioquia, Colombia, in consultation with the University of Antioquia School of Medicine and the Harvard School of Public Health, established a 25-bed hospital in Apartado, which is located far from any urban centre. (This area's population had grown rapidly because new agricultural and manufacturing enterprises had been set up.) The hospital serves as a centre for public health programmes and for acute care, and it has proved valuable as a training centre for young doctors in their "rural year" (doctores rurales), for interns, and for nurses and nurse's aides. (Modified author abstract.)

0975 **Khuri-Otaqui, S.** *Family service center program: description and analysis.* Nicosia, Cyprus, Near East Ecumenical Committee for Palestine Refugees, 1972. 54p. Engl.

A shorter version of this paper has been published in Contact (Geneva), Occasional Paper No.7, Feb 1972, 1-13.

The family service centres grew out of a series of programmes operated by the Near East Council of Churches Committee for Refugee Work (NECCCRW) to provide Palestinian refugees with food, clothing, and shelter following the 1948 conflict. In 1963, a consultation was held in Beirut to see if the relief programme, which tended to create a permanently dependent class, could be developed into a rehabilitation programme. The establishment of family service centres, which would incorporate education in nutrition, hygiene, sanitation and homemaking, and medical and nutritional facilities for children, was specifically recommended. Series of centres were set up along the West Bank, the Gaza Strip, in East Jordan, and in Lebanon. Principles on which the centres were based were: that community development must be integrated (i.e., occur at all levels simultaneously); that the foremost objective of the centres is educational in nature; that handouts are to be avoided, except in extreme emergency, and self-help emphasized; that priorities are to be established, and most urgent needs (i.e., those concerning children under five, and pregnant and lactating women) dealt with first; that extensive home visiting is essential; and that middle-level auxiliary workers should be utilized as much as possible. Staff members are given on-the-job or in-service training. A detailed description of each of the centre's functions is given, plus a section on family planning. A list of foods available in the Middle East is contained in an appendix.

0976 **King, M.** *Laboratory.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.24. 50p. Engl.
See also entry 785.

This chapter of *Medical Care in Developing Countries* contains information suitable for the training of laboratory assistants; it is also the basic material used in the teaching of clinical pathology at Makerere University (Uganda). It should prove useful to physicians and auxiliaries in rural areas who must organize and/or undertake their own laboratory work. The chapter describes in detail a wide range of methods that can be used in establishing a basic laboratory service on a limited budget. Staining methods and several biopsy techniques are described, together with specific methods for the laboratory diagnosis of anaemia, and the examination of blood, cerebrospinal fluid, urine, urethral and vaginal discharges, gastric juice, and stools. There is also advice on the collection and transport of samples, heating and lighting, records management, and selection of equipment such as microscopes, measuring instruments, centrifuges, and glassware. Appendices list reagents, apparatus, and suppliers.

0977 **King, M.** *Miscellaneous.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.30. 13p. Engl.
See also entry 785.

This final chapter of the compilation *Medical Care in Developing Countries* briefly comments on some subjects not dealt with in detail elsewhere in the book. The discussion on the dispensary is limited to hospital drug expenditures (in particular, the comparative costs of some important drugs), and to the preparation of intravenous solutions, dried skim milk, and an oral electrolyte mixture for protein-calorie malnutrition. The potential uses and benefits of plastics within hospitals are outlined, and a guide to tube feeding is included in this section. The feasibility of providing an elementary sterile supply service is raised; in particular, prepacked sterile settings of instruments (for biopsies, lumbar punctures, etc.) can be made available whenever there is an autoclave. Finally, there is advice on rabies vaccination and a WHO chart summarizing the treatment of this disease.

0978 Koje Do Community Health and Development Project, Koje Do, Kyung Nam, Korea. *Kojedo project and community medicine.* Koje Do, Korea, Koje Do Community Health and Development Project, 1973. 36p. Engl.

The Koje Do project, Koje Do, Korea, is sponsored by the Christian Medical Commission of the World Council of Churches, and its purpose is to bring low-cost, but comprehensive, health care to a defined population of a rural area, in the expectation that its successful elements will be incorporated into national planning. The primary target area of the project is a population of 30 000 in a typical rural farming community. The project serves as the community medical training centre for Pusan National University Medical School and two nursing schools. The project's functions are grouped into two parts: (1) the direct-service aspect, and (2) the broader educational aspect. The direct-service aspect involves programmes including outpatient clinics, inpatient care, public health, maternal and child health and family planning, school health, resident village aide and regional nurse service, village volunteer service, patient follow-up service, druggist education, and Sunday school. Activities in these areas cover health education, curative and preventive care, and environmental sanitation (re the village water supply). The broader educational aspect of the project covers evaluation and planning, and training for residents, medical and nursing students, army-police medics, and druggists. Other activities in this group include a clinical sociological conference, school-teacher training, medical insurance development, and the compilation of statistical reports. The workers of the project are dedicated to raising the health level of the people; they are open to ideas that might bring them closer to that goal and discourage traditional practices that might be obstacles. Findings that may be useful beyond the shores of Koje Do are beginning to emerge.

0979 Macpherson, J.E. *Nursing in North India: looking back and forward.* Saving Health (London), 9(2), Jun 1970, 35-37. Engl.

One of the two nurses who staffed the rural hostel of St. Andrew's in northern India describes her experiences. The nurses' approach to village problems combined medical work with education, evangelistic work, and even vegetable growing. The experience presented them with learning as well as teaching possibilities: a diet of carrots and "chutney" made from garden-grown leaves and berries was discovered to be both economical and extremely nutritious; a hand-flush sanitation unit recommended by the Indian government was found to be simple, cheap, and efficient; and various traditional remedies were found to be more effective than modern ones. The nurse feels, however, that the curative work being done at St. Andrew's is only touching the "tip of the iceberg" and raises the question of whether, given such limited resources, it is possible to continue the curative while keeping the emphasis on the preventive, i.e., the active promotion of health.

0980 McGowan, T.E. *Non-official health institution in rural areas.* Indian Medical Journal (Calcutta), 59, Feb 1965, 57-58. Engl.

In view of the fact that comprehensive medical coverage has yet to be attained in India, the author feels that any nonofficial attempt to bring medical services to the villages should be encouraged. He cites as an example a physician who, moved at the sight of the miserable health conditions in one village (Keshargaria), took it upon himself to found a small children's hospital there. He makes a plea to the Indian government to give financial and moral support to this and other such individual philanthropic efforts.

0981 Moor, J.F. *Maternity in an African village.* Practitioner (London), 200, Jun 1968, 847-852. Engl.

Serowe Hospital (Botswana) provides the only maternity service in the village and surrounding district, and its prime objective is to prevent maternal mortality. The unit comprises 16 maternity beds, a three-bed antenatal ward, a small isolation/premature ward, and is staffed by a nursing sister and locally trained midwives. The midwives hold antenatal clinics twice a week and cope with all normal cases; by completing a record sheet they can identify abnormalities and refer them to the hospital doctor. Caesarean section, single-handed anaesthesia, and use of blood transfusions from local donors to correct postpartum haemorrhage have all proved feasible. One year's statistical data on numbers of deliveries, complications, maternal and perinatal mortalities have been collated, but comparisons with data from other African countries and Great Britain indicate wide variations.

0982 Morley, D. Christian Medical Commission, World Council of Churches, Geneva. *Some steps through which church-related hospitals may become more deeply involved in community health care.* Geneva, Christian Medical Commission, 1972. 12p. Engl.

Unpublished document.

This paper lists a number of activities through which both church-related hospitals and communities may promote the health of the people. Services that might be undertaken by a hospital include a study of the patterns of diseases and resources available for additional health care; compilation of a district health plan; changing attitudes through dialogue with the community, group discussions, and group visits. Other measures include letting the community keep its own health records and using the "road-to-health chart" for family planning. The appendix to the paper is a questionnaire to test personal opinions about various aspects of health and hospital work.

0983 **Moss, M.** *Lokori Hospital, Northern Frontier District, Kenya.* Saving Health (London), 9(2), Jun 1970, 30-33. Engl.

The work of a small missionary hospital serving the Turkana tribe of Kenya's Northern Frontier District is described. The hospital, begun in 1961 in a small aluminum hut, has expanded to include a basic hospital unit with two wards, an operating theatre, a delivery room and support facilities. In 1968, the staff turned their attention to the appalling lack of obstetric care in the area and began a visiting campaign to convince women to come to the hospital for antenatal care and childbirth. This attempt has met with considerable success. A constant effort is being made to teach public health, but not family planning; sterility from venereal disease, apparently, renders little need for it. Treatment for trachoma is now being provided by a flying doctor service based in Nairobi. The article ends with a reflection on the immense area of the Northern Frontier District yet to be covered by medical services.

0984 **Savage, S.** *Report of a tour of the Northern States.* Nigerian Nurse (Lagos), 4(1), Jan-Mar 1972, 30-31. Engl.

A Nigerian nurse reports briefly on health services facilities in the northern states of Nigeria. The author visited the school of nursing and the hospital in Jos, where a new wing for maternity care was being completed. In Kano, she visited the city hospital, the school of nursing, and various health centres, and in Yarwa, the hospital, the school of nursing, the Ministry of Health, and the Yarwa Maternity and Child Welfare Centre. Despite improved hospital facilities, the author observed that there still exists a shortage of nurses.

0985 **Thede, J.C.** *Agony in the Amazon.* Nebraska Nurse (Omaha), 1(6), Nov 1968, 9,16-17. Engl.

An American nurse and two companions, who were sponsored by the Nebraska Amazon Project to set up a clinic in Almeirim, Brazil, describe health conditions there. Almeirim, a village of 3 000 people located 250 miles up the Amazon River, has no doctor. The most common diseases encountered are malaria, typhoid, dysentery, venereal diseases, skin disorders, and the common cold; obstetric attention is badly needed. The people's diet consists of farina, rice, and beans; meat and milk are scarce, and tomatoes are considered a luxury. So far, attempts have been made to teach the people how to grow a wider variety of nutritious foods. A Mother's Club has been started to help promote acceptance of these foods and other community causes. A new ambulatory-maternity clinic containing two consultation rooms, a pharmacy, a laboratory, a delivery room, a 6-bed maternity ward, and a classroom is currently being built; convincing the women to use this facility is expected to be a challenge.

0986 **Waddell, K.M.** *Second class medicine?* Saving Health (London), 10(3), Sep 1971, 45-47. Engl.

A British doctor working in a rural hospital in Uganda compares health needs in a developing country with those in a developed country. He feels that the quality of service could be similar, although in a developing country the caseload may be higher and the finances lower than in a developed country. The nature of disease in developing countries is generally communicable, and as such, can be prevented by mass immunization and other inexpensive prophylactic measures. The Kagando Hospital, begun in 1964, runs on the philosophy that its work should be suited to the needs and resources of the community. It is self-supporting. Patients are charged a lump sum (one within the reach of even the poorest) for all examinations and treatment for a month. Very ill people get more than their money's worth; those not so ill get less; the author compares it to a miniature (British) National Health System. By excluding the luxuries, the hospital does succeed in providing fairly good service for this sum, in spite of a growing workload.

III.2 Rural outpatient care

See also: 0776, 0781, 0795, 0822, 0892, 0909, 0935, 0937, 0942, 0964, 0966, 0968, 0969, 0970, 0971, 0973, 0981, 0985, 1025, 1046, 1067, 1068, 1069, 1110, 1172, 1183, 1326, 1331, 1332, 1337, 1344, 1381

0987 **Anderson, A.** *Clinic for Penas.* Journal of Practical Nursing (New York), 16, Mar 1966, 33-34. Engl.

A large Peace Corps public health programme aims at teaching preventive health care procedures through the establishment of clean water supplies, construction of latrines, and massive immunization. Nurses serve in the programme and also provide technical assistance to the nonprofessional volunteers who have no previous medical training. In one project two licensed practical nurses established a small daily health clinic in an isolated Bolivian mountain village. Despite the lack of medical supplies (mostly donated by Bolivian pharmaceutical companies), they treated an endless stream of peasants both in the village and during frequent visits to surrounding villages. Two obstacles to be faced were

the superstitions of the local people and the inadequate water supply.

0988 **Arole, R.S., Arole, M.** Christian Medical Commission, World Council of Churches, Geneva. *Comprehensive rural health project, Jamkhed, India.* Geneva, Christian Medical Commission, 1972. 18p. Engl.

This article contains the proposal for, and the first progress report of, the comprehensive rural health project, Jamkhed, India. The project, which is supported by the Christian Medical Commission (World Council of Churches), serves a defined area in a rural district characterized by rapid population growth, chronic and communicable diseases, and a need felt for, along with a willingness to participate in, medical care. The project emphasizes preventive care and health education; only 30% of time and money is spent on curative services. As well as providing programmes in family planning, maternal and child health, leprosy and tuberculosis survey and control, and guinea worm eradication, the project functions as a training centre for medical and paramedical personnel, teachers, community leaders, village midwives, and local healers. Satellite clinics have been established within a 10-mile radius of the project. Details concerning the project's budget, curriculum, operation, phasing, and continuation are given. Three maps of the area are appended.

0989 **Centre d'Hygiene Familiale, Port-au-Prince.** *Laboratoire interdisciplinaire de medecine communautaire et de la planification familiale. (Interdisciplinary Laboratory on Community Medicine and Family Planning).* Port-au-Prince, Haiti, Centre d'Hygiene Familiale, Jun 1973. 156p. Fren.

Located in Plaine du Cul de Sac (a triangle formed by three Haitian communities), the Interdisciplinary Laboratory on Community Medicine and Family Planning proposes to provide the area's inhabitants with facilities for the promotion and preservation of health; to establish a model of health organization that could be repeated in other localities and used for the training and orientation of students and health personnel; and to carry out studies and research with a view to facilitating health planning at the national level. The project plans to provide the family health centre and the peripheral health establishments with the necessary personnel to improve their facilities and operation and to stimulate health and economic programmes. This manual provides instruction for personnel working on this and similar projects. The material covers consultation, maternal and child health, family planning, control of communicable diseases, environmental sanitation, vital and health statistics, health education, mobile clinics and special programmes, training of personnel, record keeping, etc. The manual explains what to do and when to do it, rather than how.

0990 **Chondhury, Z.** *Progress report: Gonoshasthaya Kendra, Bangladesh, Dec 1972-Jun 1973.* In McCormick, G., ed., CUSO Readings in Health, Ottawa, Canadian University Service Overseas, n.d., 178-184. Engl.

Appeared also in Dey, S.K., ed., Bangladesh - a Broad Survey of Institutions for Rural Development, UNROD Information Paper No.24, 28 Feb 1973, 119.

This is the third progress report of a community health project in Savar, Bangladesh. A local health insurance scheme, the first in Bangladesh, helps defray some of the operating costs of health care delivery; and the author points out that such a scheme implemented nationally would more than double the amount now being spent by the government on health services. The success of the health insurance scheme depends on the quality of the clinics and subcentres whose popularity to date has been due to the demonstrated effectiveness of curative medicine (e.g., a course of antibiotics). This popularity, however, gives staff the opportunity to promote preventive, educative, and family planning measures. A new policy in family planning, that of sending a small team of trained counselors into villages, has proved moderately successful but a programme to train volunteer auxiliaries has been disappointing; it is felt that an intermediate grade of medical auxiliary (with more training than a volunteer), employed full-time and salaried, is needed. The results of a demographic survey of the region are presented in six tables.

0991 **Costa Rica, Ministry of Public Health.** *Puestos de salud rural. (Rural health posts).* San Jose, Ministry of Public Health, General Health Division, Rural Health Programme, Oct 1973. 13p. Span.

Unpublished document.

The rural health programme in Costa Rica was created in 1972 to cater to the previously neglected and less accessible rural areas. The principle objectives are: (1) to offer small, rural communities a complete health service that uses simple techniques administered by supervised, trained auxiliaries; (2) to encourage communities to supply materials, finance, and manpower and otherwise participate in health activities; (3) to utilize the rural services for practical training of health-related personnel; and (4) to maintain the improved health status by keeping an epidemiological watch. Rural health posts staffed by auxiliaries will be established, and each post will organize its own activities according to local needs. The document details the equipment required for this work and includes building specifications, office facilities needed, etc. There is also a full list of activities and responsibilities of the auxiliary health worker, including specific objectives for the different fields (disease surveillance, vaccinations, environmental health, MCH, data collection, health education, staff training, organization of community development, and first aid).

0992 **Datta, S.P., Srinivas, D.K.** *Mortality trends in villages of rural health centre, Pondicherry.* Indian Journal of Medical Research (New Delhi), 60(2), Feb 1972, 296-304. Engl. 11 refs.

A study was carried out in villages of Pondicherry (India) in 1970 to determine death rates, causes of death, and changing trends from 1967 in order to evaluate the activities of the rural health centre. Respiratory diseases, nutritional deficiencies, and accidents gained in relative importance as causes of death over the study period, whereas there was a decrease in maternal mortality and deaths caused by infective and parasitic diseases, anaemias, and diseases of early infancy. The overall death rate was 17.2 per 1 000 in 1967 and 15.2 in 1970. Neonatal mortality and infant mortality both declined over the study period, whereas mortality increased in the pre-school (1-4 years) and school (5-14 years) age-groups. Death rates in adults (15-54 years) and in the elderly (55 years and over) both declined. The proportional mortality indicator was 43% in 1967 and 40.1% in 1970.

0993 **Fendall, N.R.** *Health centre.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.3. 14p. Engl.

See also entry 785.

Fundamental to the nature of a health centre is that it should extend its influence outside its own precincts and into the homes of the people, recruiting the assistance of schoolteachers, local elders, and other influential members of the community. This is illustrated by the structure, staffing, and operation of health centres in Kenya. Doctors are scarce, but the value and competence of trained local auxiliaries is emphasized. Categories of auxiliary range from medical assistant (in administrative charge) and health inspector, through various grades of nurse, dresser, midwife, and health visitor. However, the health visitor has not been well accepted in Kenya and so is to be replaced by the "public health nurse," specially trained for the diverse needs of the health centre. The centre provides many services for the individual and for the community. One important activity is multipurpose clinics held periodically in surrounding villages; these combine curative medicine with health talks and inspection tours of water supplies, latrines, food shops, etc. Although the health centres receive drugs and guides for the routine treatment of the more important local diseases, there is a need for further laboratory expertise to overcome some of the diagnostic problems. A National Reference Health Centre has been established to support the local centres by providing operational guidelines, training and retraining of auxiliaries, and by conducting research into community health and health centre practice.

0994 **Fendall, N.R.** *Rural health centres in North Nyanza district of Kenya.* Journal of Tropical Medicine and Hygiene (London), 58, Jun 1955, 123-132; Jul 1955, 149-157. Engl.

Early attempts to amalgamate curative and preventive medicine in Britain gave rise to the health centre concept, and during the 1940s and later several health centres were established in urban areas. East Africa adopted this approach but applied it to the needs of the rural population, as exemplified by the health centres in North Nyanza, Kenya. They form the core of the district's health services, which comprise a district hospital (250 beds), a subsidiary hospital (76 beds), nine health centres, 15 dispensaries, and nine mobile health units to serve the area's 750 000 inhabitants. An organizational chart that shows the interrelationships of the different facilities is included. The financial aspect is thoroughly discussed, and salaries for various cadres of health staff as well as the capital and recurring costs of construction and maintenance of health centres are detailed. The centres' supervisory personnel, who are all Africans, include hospital or medical assistants, dressers and nurses, midwives, health inspectors, and health visitors; their individual training and roles are described. Domiciliary treatments are greatly encouraged. This emphasis serves two purposes: the services continue to emanate from the health centre rather than the hospital, and the masses of persons who, each day, would converge on the centres are kept to a minimum. Still, most centres are serving up to three times the population for which they were created, and many local governments who are willing to share the financing have petitioned the central government for centres.

0995 **Ford, M.J., Cruz, A.H.** *Rural health unit in the Philippines.* Public Health Reports (Washington, D.C.), 72(8), Aug 1957, 687-695. Engl.

A history of the Filipino public health services is traced from the time of the Spanish occupation, through the American occupation, independence, and up until the passing of the Rural Health Act in 1954. Under each administration, steps had been taken to bring health services into the rural areas. These included the establishment of puericulture centres in 1925 for maternal and child health, of maternity and charity clinics in 1939, and of a reorganized department of health divided into bureaus (i.e., bureau of hospitals, bureau of quarantine, and bureau of health) in 1947. By mid-century, many separate local health programmes had accumulated, most of them concentrated in urban centres. Although mass campaigns had eradicated highly epidemic diseases such as cholera, smallpox, and to a lesser extent, malaria, other health problems, such as enteritis, schistosomiasis, nutritional deficiencies, and high infant mortality due to poor obstetric care remained. An American study of the situation in 1951 resulted in the rural health unit project, later slightly altered and expanded in the Rural Health Act of 1954. It consisted in providing integrated health services at the local level through a health team composed of a physician, a public health nurse, a midwife, and a sanitary inspector. The last has long been a feature of Filipino health services; his duties include giving first aid, immunizing, making sanitary surveys, diagnosing and treating disease, and filling out birth, death, and morbidity certificates. In 1953, a survey was conducted to determine the usefulness of the equipment provided in the rural health units. The findings of the survey are detailed and could prove useful to countries in the midst of implementing similar health delivery systems.

0996 **Gibson, C.D.** *Neighborhood health center: the primary unit of health care.* American Journal of Public Health (New York), 58(7), Jul 1968, 1188-1191. Engl.

The author discusses the issues prompting the relocation of health services from the hospital to the health centre. These include: the widening gap (ethnic, educational, and economic) between the health professional and the urban poor; the fragmentation of existing services into preventive, curative, disease-oriented, and research programmes; the lack of privately practicing physicians in low-income areas; and a need for new multidisciplinary approaches to bring research findings into practice. The Tufts-Columbia Point Health Center is one of 41 centres now serving urban and rural low-income ghettos in the United States. In it successful and meaningful interaction between the community and health centre has been achieved. It operates on a system, whereby a group of 35 families is assigned to a team made up of an internist, pediatrician, social worker, and family health worker (an indigenous aide) and this has been enthusiastically accepted by staff and patients; a functioning board and grievance committee (made up of community members) is evidence of the effective role the community can play in policymaking.

0997 **Jara, J.B.** Chile, National Health Service. *Programa de construccion de 64 postas para la atencion de la salud en el medio rural. (Construction of 64 rural health posts for health care in rural areas).* Santiago, National Health Service, Feb 1968. 4p. Span.

Unpublished document.

During the past several years, Chile's National Health Service has prepared a detailed plan for providing health care to rural communities. The first phase of this plan calls for the construction of 300 health posts (eventual goal is 500). Each post would emphasize the following programmes: prenatal and infant care, family planning, communicable disease control, environmental sanitation, health education, and simplified medical care. A preliminary budget for the the first 64 rural health posts is included. Costs are to be shared by the National Health Service (25%), the communities (25%), and foreign aid programmes (50%). These posts would be operated by trained resident auxiliaries regularly supervised by the nearest rural health centre. Thirty-two health centres were to be constructed during 1968, with the National Health Service and the community sharing the financing on a 50:50 basis. These health centres would supervise an average of two health posts each.

0998 **Killen, O.H.** *Rural health centres: Kiambu.* East African Medical Journal (Nairobi), 37(3), Mar 1960, 204-216. Engl.

Kiambu district (Kenya) reorganized its health system from a mainly therapeutic service based on dispensaries and a central hospital, to a more comprehensive one based on local health centres. This article describes the organization and staffing of the health services and the active involvement of the health centre workers in diverse areas such as maternity and child care, family welfare, special clinics, specific disease programmes, and the welfare of handicapped and old people. The new approach is also manifest in the replacement of the mobile clinic, which was limited to curative medicine, with the mobile health unit. Now 4 days a week, the health centre staff tour the area giving talks, holding clinics, visiting homes, etc. The health centres have achieved some success in reaching the high-risk group of children under age five, but further expansion of services will depend on the increased availability of midwives and assistant health visitors ("general practitioner social nurses").

0999 **Laugesen, M.** Coordinating Agency for Health Planning, New Delhi. *Patient retained health records.* New Delhi, Coordinating Agency for Health Planning, 1973. 60p. Engl. 12 refs.

The "patient retained health records" used in India for outpatient hospitals and dispensaries are described. These forms were revised and adopted in 1972 after pretesting in voluntary hospitals in Ferozepur, Muzaffarpur, Dhariwal, and Jammalamadugu. These would be useful for those planning means of health record maintenance. The objective of the records is to redirect the emphasis in health care from disease care toward health preservation. Also detailed are the "Morley Child Health Record" and other "patient retained" records, as well as instructions for their use. Samples of records actually in use are appended.

1000 **Paterson, E.H.** Christian Medical Commission, World Council of Churches, Geneva. *Kwun Tong community health project of the United Christian Hospitals, Hong Kong.* Contact (Geneva), 15, Jun 1973, 1-18. Engl.

Community health care is generally associated with a rural situation, i.e., the rural hospital with its network of health centres and health posts. This case, however, is an attempt to bring comprehensive health care to the people living in high-rise resettlement blocks, "vertical villages," in the satellite city of Kwun Tong, located at the periphery of Hong Kong. The elements of health care and the means through which each is promoted are described, and the organization of the programme, its teaching function, and its future aims are discussed. Along with the usual activities, i.e., child health, home visits, and health education, the programme is concerned with care of the aged, industrial care, and mental health care. Fundamental to its philosophy is the involvement of community members in various volunteer programmes, with a view to the community's taking on the responsibility of its own health.

1001 **Rao, K.N.** *Public health in rural communities.* Journal of the Indian Medical Association (Calcutta), 40(6), 16 Mar 1963, 292-295. Engl.

India's First Five-Year Plan, 1951, recognized the need for rural health services. The central objective of the plan was to initiate "a process of development which

will raise the living standards and open out to the people new opportunities for a richer and more varied life." Health priorities were given to the provision of pure water supplies, sanitation, primary health units, hospitals, dispensaries, control of communicable diseases, education, research, family planning, nutrition, and health education. For administrative convenience, the entire country was divided into 5 000 blocks, each consisting of about 100 villages with a population of about 66 000 (1951 census) per block. Each block was to have a primary health centre and three subcentres. Health centre buildings were designed to provide facilities for consultation, dispensing, operating, family planning, health education, and maternal and child services, including labour. Development of primary health centres, their functions, recommendations of planning committees, and conferences concerning these centres are discussed. Health is seen as a fundamental necessity of life involving a cooperative effort on the part of the citizenry, the professional medical people, national government, and international organizations.

1002 **Rizk, F.** *Rural health services in U.A.R.* Journal of the Egyptian Public Health Association (Cairo), 43, 1968, Suppl., 3-13. Engl.

This paper presents a brief history of Egypt's rural health service and describes the changes incorporated into the new plan of "rural health units," introduced in 1962, as a result of the accumulated experience gained from former attempts. The units have been designed to respond to specific needs (i.e., each unit includes a laboratory assistant, since much of the disease is of a parasitic nature, etc.). The establishment of 1 150 rural health units has extended coverage from one health unit per 30 000 inhabitants to one per 10 000. The aim is to have one unit per village (approximately 5 000 persons). The basic services include: medical care via the outpatient clinic, the laboratory, and the pharmacy; communicable disease control through vaccination; maternal and child health services; guidance in environmental sanitation; and health education. The following precepts are considered basic to the philosophy of the programme: that the unit be located within 3 km of the population it is to serve; that the clinic's main objective be the promotion of health; that the whole health team take a positive leadership role in health education; that to this end, wherever possible, the doctor and his assistants be from the local area in which they serve; and that the rural unit be the base for all rural health reform projects, for it provides the necessary health structure to ensure the successful coordination of each project in all its phases. High priority in national planning has been given to rural health in recognition of the fact that it is fundamental to social and economic development.

1003 **Roemer, M.I.** *Organized ambulatory health service in international perspective.* International Journal of Health Services (Farmington, N.Y.), 1(1), 1971, 18-27. Engl. 41 refs.

Historically, health services for the ambulatory patient have been organized throughout the world along several paths: (1) separate dispensaries for treatment of the sick, (2) hospital outpatient departments, (3) specialized preventive clinics under public health agencies, industries, or schools, (4) private group medical practice, and (5) health centres of either preventive or integrated preventive-curative scope. All five of these types of organized service continue to expand throughout the world, in relation to a declining importance of private individualistic medical practice. The trend is toward integrated ambulatory service for both preventive and curative services in health centres. The staffing and scope of health centres vary with the economic development of a country and its prevailing political philosophy. As a result of dialectical dynamics between hospitals and ambulatory care centres, these two types of service are becoming integrated in regionalized networks, increasingly supported by funds from collective sources (both taxation and insurance) and designed through national health planning. Increasing use is being made of paramedical personnel working with doctors in health teams. (Author abstract.)

1004 **Saugrain, J.** *Centres de sante en Ethiopie. (Health centres in Ethiopia).* Medecine Tropicale: Revue du Service de Sante des Troupes de Marine (Marseille), 27(4), Jul-Aug 1967, 387-395. Fren.

This study was undertaken to see how the system of rural health centres in Ethiopia compared in organization, function, and effectiveness with the francophone "Service de Lutte contre les Grandes Endemies." The health centre concept has long been lauded by international organizations and anglophone countries as the ideal solution to the problem of rural health delivery, particularly in developing countries; francophone countries have generally adhered to the already proven mobile prophylactic method of the "Service de Lutte." The health centre provides both curative and preventive services, with the emphasis on the preventive (MCH, environmental sanitation, health education, etc.). It is usually connected with a rural hospital, to which it refers patients; although most centres are equipped with some inpatient facilities, these are only used in emergencies. The main professional staff are the health officer, community nurse, and sanitarian. Where possible there are two sets of personnel: one to take care of the centre and the other to visit surrounding villages and health posts. Observation of four such Ethiopian centres revealed a gap between health centres in theory and in practice; most were functioning well below capacity, and scattered rural populations were not being reached due to lack of transportation. The success of the centre depended, to a large extent, on the attitude of the staff and the community. Communities in Ethiopia were particularly receptive and cooperative, e.g., in forming volunteer community health councils, but the author wonders whether the same attitude would be found elsewhere in Africa. Finally, he concludes that the health centre concept is only feasible in the presence of good supervision by a doctor trained in

public health, and adequate transportation; both of these are at present beyond the reach of most developing countries. After observing that the health centre, with a staff of 10-12 persons, accomplishes no more than does a rural health post manned by auxiliary health workers in francophone Africa, he claims that Service de Lutte contre les Grandes Endemies can be justified as an interim measure, until such time as sufficient means are available to implement the health centre concept properly.

1005 **Soe, T.** *Health in the hills.* Forward (Rangoon), 11(13), 15 Feb 1973, 9-11. Engl.

Introduction of rural health centres into remote areas, successful programmes for control of communicable diseases, and mobile medical services have all made health care more widely accessible to the people in Kavah State, Burma. To help overcome the language barrier, local people are being recruited for the hospital staff, and health education is slowly modifying harmful customs, superstitions, and the reluctance to accept modern medical methods. In 1952, this state had 1 hospital and a staff of 12; in 1972 there were 6 hospitals, 15 rural health centres, 12 branch health centres, and 5 mother and child welfare centres, with a total staff of 315.

1006 **Srouji, E.** *Rural primary health care center for Lebanon.* Lebanese Medical Journal (Beirut), 25(6), 1972, 529-540. Engl. 9 refs.

The bulk of the curative care in Lebanon is provided by the private sector. The other functions of health care – promotion of health, prevention of disease, and rehabilitation – are primarily responsibilities of the public sector (Ministry of Health etc.). The fulfillment of these functions is greatly hampered by the absence of a basic primary health care centre in the deprived parts of the country. The specific functions of such a centre, its design, and the qualifications and training of the health personnel to run it are described. The establishment of such centres in the whole of the rural areas of the country over a period of 10 years is detailed with due consideration to the manpower and budgetary constraints. (Author abstract.)

1007 **Stambuli, P.** *Rural health.* AFYA (Nairobi), 4(7), Jul 1970, 3-6. Engl.

In an attempt to provide a more relevant and effective public health service in Lindi District (Tanzania), the following programmes have been established: (1) a refresher course/seminar for all rural health staff; (2) formation of a mobile public health team (whose duties include nutrition, sanitation, MCH, plus agricultural and rural development); (3) formation of mobile dispensary teams to supplement the work of the public health group; (4) revitalization of the local village health committees; (5) comprehensive disease control programmes for leprosy and tuberculosis; (6) training of villagers as medical helpers, to provide first aid and to assist the visiting teams; (7) introduction of ujamaa (cooperative) village health committees; and, finally (8) operation of two health centres in the district.

1008 **Than U, T.** *Health team comes to Waw.* Forward (Rangoon), 11(3), 15 Sep 1972, 18-21. Engl.

Waw Township in Burma has one 16-bed hospital for its 150 000 population. Consequently, a 1-day clinic held by several visiting medical specialists was well attended. With the assistance of local Red Cross workers, the specialists succeeded in treating 936 patients in the single day. The group covered the fields of ophthalmology, pediatrics, surgery, general medicine, psychiatry, obstetrics and gynaecology, dentistry, neurology, and ear, nose, and throat conditions. These short field trips serve several purposes: (1) they enable doctors to find out more about the medical problems of rural communities; (2) patients benefit from specialist attention they would not normally be able to receive; (3) the morale of the local medical officers is boosted; (4) there is an opportunity for widespread public health education; (5) the working relationship between professional colleagues is improved; and (6) the people have greater faith in modern medical practices and the activities of their local health staff.

1009 **van Amelsvoort, V., van Etten, G.** *Outpatient departments in hospitals of Mwanza region, Tanzania: their relevance for the present health services.* Mwanza, Tanzania, Ministry of Health, 30 Jun 1971. 67p. Engl.
Unpublished document.

This is a formal evaluative study designed to provide hospitals in Mwanza (Tanzania) with information on users of their facilities, to detect possible over- and/or underutilization of hospital services, to clarify factors influencing the use of hospital services, and to recommend improvements in outpatient departments. Medical services (hospitals, health centres, and dispensaries) in the Mwanza region were studied and the results detailed. Study was made of the use of outpatient departments in relation to daily attendance; availability of other medical units; religion, education, age, and sex of facility users; domicile and distances travelled by patients; diagnoses; and other patterns. While the study was being conducted, national changes occurred in health care delivery plans for Tanzania. Hospitals were asked to be involved in community level work and mobile health services were organized for the whole country. Research results and recommendations relate to conditions prior to these large-scale changes and suggestions offered are based on results of the study. One recommendation is that centres be established countrywide, since it was found that outpatient departments had been used like dispensaries, too often serving only persons who live nearby. It is suggested that extramural activities be added to OPD services; specifically, these should be the public health services of environmental sanitation and health education.

1010 **Venezuela, Ministry of Health and Social Welfare.** *Programa de organizacion funcional del hospital general de Coro. (Coro General Hospital organization programme).* Caracas, Ministry of Health and Social Welfare, Jan 1973. 77p. Span.

The general hospital of Coro, Venezuela, is to be a comprehensive health care centre for the coordination of activities of hospital and outpatient health care in the region. Existing resources are to be distributed such that all specialized medical activities are centralized in the hospital, and all nonspecialized activities are decentralized toward peripheral centres. The scheme will permit a greater territorial coverage, making health care services more easily accessible to all inhabitants of the state. The hospital will embrace five health districts; each district will be head of one or more health subdivisions. Thus, Health District One covers six geographical health districts and has jurisdiction over 11 rural health centres. Other health districts have fewer geographic health subdivisions with jurisdiction over a smaller number of rural health centres.

1011 Viswanathan, D.K. Bombay State, India, Department of Public Health. *Primary health units operation manual.* Bombay, Department of Public Health, Nov 1955. 89p. Engl.

This manual provides information on the organization and activities of the primary health units in rural areas of Bombay State, India. It describes the medical care, disease control, MCH, school health, family planning, health education, recording of vital statistics, and environmental sanitation. Also recorded are the categories of staff to be employed (usually a doctor, nurse-midwife or health visitor, midwife, sanitarian, and vaccinator) and their respective duties, training, and supervision. Procedures for maintenance of patient records, submission of activity reports, preparation of the stock register and budgets, etc. are described and illustrated with specimen forms. In addition, extensive appendices contain a selection of record forms, lists of recommended equipment and drugs, and design plans (for a health centre and for different types of latrine).

1012 Vogel, L.C., Sjoerdsma, A. *Brief encounter between patient and staff.* Kenya Nursing Journal (Nairobi), Jun 1973, 43-46. Engl.

This is a report of a study of the problems in an outpatient department of the Machakos Hospital in Kenya. Overcrowding, long waiting periods, and little explanation of clinical activities were discouraging to the patients, while heavy work loads, inadequate facilities, drug shortages, and lack of overall staff coordination were discouraging to clinical personnel. These problems can be solved to a certain extent by improved efficiency. Real improvements included delegation of administrative duties to clerical staff instead of to the nurse or the medical assistant; standardization and codification of prescriptions; prepackaging of drugs; and modification of the layout of the clinic to promote a smoother patient flow. These are improvements that require little or no money, but rather, initiative, leadership, and organization on the part of a few staff members.

1013 Vogel, L.C., Dissevelt, A.G., Quadros, F.C., Gemert, W. *Operational study of a hospital outpatient department in Kenya.* Bulletin of the International Epidemiological Association (Belfast), 20, Nov 1970, 171-178. Engl.

Attendance at the outpatient departments of the government hospitals in Kenya increased sixfold during the period between 1962 and 1967, resulting in severe strain on staff, resources, and facilities, and a general deterioration in the quality of medical care. The possibilities of increasing the efficiency of the existing limited resources were investigated by determining rates of patient flow, mean waiting time of the patient at each station, and the amount of time spent by each staff member on each component of his work. It was discovered that the medical assistant could make better use of his time if his administrative work load could be delegated to clerical staff.

1014 Yen, Y.C., Feliciano, G.M. International Institute of Rural Reconstruction, New York. Philippine Rural Reconstruction Movement, Manila. *Health centers, health workers, mothers' classes.* In Price, H.B., ed., Rural Reconstruction and Development: A Manual for Field Workers, New York, Frederick A. Praeger, 1967, 251-270. Engl.

Three principal ways in which the Philippine Rural Reconstruction Movement (PRRM) works with the barrio people to improve their health conditions are: (1) establishment of a health centre in the barrio; (2) training young adults as auxiliary health workers; and (3) conducting health education classes for mothers. (1) The health centre's work consists mainly of training and educational activities. The rural reconstruction worker (RRW) bridges the gap between villagers and health agencies, encourages participation in the health centre's activities, organizes and conducts training classes for auxiliary health workers, and purchases medicines. Roles of other personnel involved with the health centre (PRRM supervisors, visiting specialists, local population) are also described. (2) Auxiliary health workers in the barrio are carefully selected young people who have some high school education and live in the barrio; training enables them to provide simple health services (general first aid, disease control, dental hygiene) and convey essential health information to villagers. (3) Mothers' classes aim at training mothers and expectant mothers in personal hygiene, prenatal/postnatal care, infant care, nutrition, etc. The organization and conduct of these classes are described in some detail. The author also lists the many problems that have been encountered in these three areas (poor motivation, inadequate planning, influence of traditional beliefs, etc.) and suggests responses to help overcome them; many of these responses are better ways of explaining the activities of the health centre and of gaining more cooperation from the local people.

III.3 Mobile units and services

See also: 0998, 1007

1015 Abramowitz, J. *Children's dental program for American Indians.* Journal of the American Den-

tal Association (Chicago), 81(2), Aug 1970, 395-405. Engl. 11 refs.

A dental health programme carried out by the United States Indian Health Service among American Indians, Eskimos, and Aleuts has evolved over several years from one basically concerned with extractions to one whose emphasis is on corrective treatment, especially for children, and the prevention of dental problems through health education. This programme makes efficient use of limited resources by adoption of an incremental care system with age and treatment priorities. Preschool children receive primary attention, the youngest school children are next, and so on. Within treatment priorities, emergency care for all patients, regardless of age, takes precedence, followed by preventive care (including dietary fluorides and health education), corrective care, and rehabilitative care. Emphasis is placed on providing the most essential dental care for the age groups with highest priority to ensure long-range improvement in the dental health of the population and decreasing demand on the service. The service designed its own clinics and equipment; supports training, research, and development; employs an increasing number of dental assistants (95% are local women); and is committed to encouraging community participation in all aspects of the programme, for location of facilities to choice of clinic hours. A computerized system for epidemiologic and service data has improved programme evaluation.

1016 **Antiseptic, Madras, India.** *Government will help experts to start rural hospitals.* Antiseptic (Madras, India), 68(8), Aug 1971, 623. Engl. Editorial.

Notification is given that the Madras State Government will help finance a scheme to provide the rural areas with hospital services staffed by young medical specialists. A mobile training/medical service centre will be active in each district; in addition to providing medical care for the rural population, these mobile units will provide doctors working in primary health centres with an opportunity to gain wider experience. The first centres are already in operation.

1017 **Btesh, S.** Israel, Ministry of Health. *Health centre: its philosophy and function.* Jerusalem, Ministry of Health, May 1956. 14p. Engl., Hebrew.

This summary of the "health centre" concept, as understood by the Ministry of Health (Israel), describes the organization, functions, and underlying philosophy of the health centre as an integral part of a comprehensive health service. The author discusses the benefits to the community of the combination of curative and preventive services offered by the health centre (health education, MCH, medical treatment, etc.), especially when these form part of a regional service supplemented by hospitals and subcentres.

1018 **Cachia, C.** *Mobile health unit amongst the Masai.* East African Medical Journal (Nairobi), 37(3), Mar 1960, 224-231. Engl.

Before a mobile health unit was introduced, Kajiado District (Kenya) was served by a government hospital and static dispensaries that offered little beyond curative measures. These static units were inappropriate to the needs of the nomadic Masai, for a health service must move with the tribes and actively promote health education. The author describes the organization and operation of a small mobile unit and points out that in its first year (1958-59) it treated more patients than did the main district hospital.

1019 **Dadgar, M.** *Rural health service instead of military service.* AFYA (Nairobi), 6(3), Mar 1972, 10-12. Engl.

In Iran, graduates in the health professions must serve 2 years in the military or in a "health corps," which was created in 1964 to provide health services for the thousands of small, widely scattered, rural communities. All physicians, pharmacists, dentists, midwives, nurses, health educators, sanitary engineers, laboratory technicians, university graduates in the social sciences and related fields, and secondary school graduates, who are surplus to the army's requirements, serve in the corps (part of the Ministry of Health); they are trained for 6 months and then assigned to mobile health teams. Some 400 such teams and 150 dental, laboratory, health education, and environmental health teams serve a third of the country's rural population. Through curative medicine, the health team gains the confidence of villagers and then can encourage them to participate in tackling the more fundamental health problems by introducing sanitation, drinking water, and vaccination programmes. Together with the activities of about 180 health clinics and 250 dispensaries, the health corps has succeeded in significantly altering the health pattern of the people. Attempts are now under way to induce the physicians to remain at the rural clinics after their 2 years service, so that a more permanent system of health care can be established.

1020 **de Glanville, H., ed(s).** *Northern Tanzania flying doctor service.* AFYA (Nairobi), 3(4), Apr 1969, 5-6. Engl.

Introduced in 1968, the Northern Tanzania Flying Doctor Service is supported by the Evangelical Lutheran Church of Tanzania and the African Medical and Research Foundation. Its pilot-doctor and nurse-midwife bring regular medical services to 10 isolated dispensaries (another eight are planned) that are so inaccessible that previously they were almost never visited by a doctor. Patients needing special care are transported to hospital, but this air ambulance service is only provided for acute emergencies. Each dispensary has built its own landing strip, and most are equipped with a radio. On his fortnightly visits, the doctor sees perhaps 20 patients whom the local auxiliary has referred, i.e., he acts as the auxiliary's consultant, not as an alternative, higher-level doctor. At the same time, the nurse holds antenatal and child welfare clinics, and sees

about eight patients a day. In addition, the service supplies the dispensaries with basic drugs and enables regional medical and health personnel to visit these remote parts. Although health standards in the areas visited by the service have clearly improved, not all tribes are equally appreciative. The local witch doctor may influence a tribe too strongly or perhaps the doctor was unable to save a moribund case on his first visit. But progress is being made; the local auxiliaries are learning from the doctor's visits, and preventive medicine is being introduced – the fact that interest is now being taken in the auxiliaries encourages them to greater effort.

1021 Diesh, P. *Mobile training-cum-service hospital.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 29-33. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

The mobile training-cum-service hospital was introduced in India because lower-level medical institutions were working in isolation from district and regional hospitals. The objective of the service has been to mobilize teams of specialists from district and teaching hospitals to: (1) extend good quality medical and surgical care to rural areas; (2) support national health programmes in the field; (3) strengthen the training of undergraduate medical students in curative, preventive, and promotive aspects of health and family planning within the community setting; and (4) provide in-service and refresher training for medical, paramedical, and auxiliary staff in primary health centres and tehsil and taluk hospitals. For several reasons the programme has not progressed as expected. In particular, lack of coordination between the director of health services and the director of medical education has resulted in a lack of interaction between mobile and health centre staffs. The author suggests that a committee be set up to establish proper liaison between the medical colleges, health officials, and the local administration. Details of the committee, i.e., its personnel and function, and some practical suggestions for upgrading the service in the future are outlined.

1022 Farrow, G. *Flying doctors of East Africa.* Nursing Times (London), 66(20), 14 May 1970, 663. Engl.

The East African Flying Doctor Service, Nairobi, Kenya, consists of five aircraft and a small band of doctors and nurses. It serves rural areas of Uganda and Tanzania as well as those of Kenya. Staff are alerted by radio messages and are flown to the site of an emergency where they perform on-the-spot surgery or arrange to have the patient flown into Nairobi for treatment. Some 14 000 radio calls and 400 flights (amounting to .25 million miles) are made per year. During routine safaris to remote areas, family planning advice is given, but because of the status that goes with childbearing it is not well received. The service is presently seeking funds to build a hangar for its aircraft.

1023 Habte, D., Hadgu, P. *Mobile vaccination team in an urban community.* Ethiopian Medical Journal (Addis Ababa), 11(1), Jan 1973, 121-127. Engl.

A mobile health service has been evolving in Addis Ababa, Ethiopia, since 1962. It originally attempted to provide a variety of services, but its vaccination activities were neglected because of the overwhelming demand for curative medicine. A mobile vaccination unit was later introduced to supplement the activities of the fixed child health centres, which are visited on a regular basis. The team consists of three advanced dressers, one clerk, a driver, and occasionally medical and nursing students. The immunization schedule and numbers of vaccinations performed indicate that a specialized mobile programme such as this, using trained auxiliary staff, can achieve widespread coverage at minimal expense.

1024 International Planned Parenthood Federation, London. *Mobile teams successful in Kenya.* International Planned Parenthood News (London), 210, Sep 1971, 2. Engl.

In cooperation with the government's rural maternal and child health programme, seven mobile teams of the International Planned Parenthood Federation provided more than one-third of all family planning services and recruited one-third of all new acceptors in Kenya during 1970. The teams (comprising a doctor, a midwife, and a field educator) visited government hospitals, health centres, subcentres, and dispensaries at regular intervals. They also spread information about the availability of clinic services and assisted educative activities in their areas by lecturing on health, hygiene, and nutrition. Paramedical workers (usually midwives) have proved successful in running clinic sessions and recruiting new acceptors, and training future clinic personnel is regarded as an important component of the scheme. Shortages of clerical staff, however, have forced midwives and educational personnel to undertake routine clerical duties necessary to keep the clinics going.

1025 Korte, R., Patel, P.M. *Operational aspects of mobile and stationary young child clinics in Lushoto, Tanzania.* Journal of Tropical Pediatrics and Environmental Child Health (Kampala), 20(2), Apr 1974, 90-105. Engl. 31 refs.

The basic health services operated by the government and the mobile young child clinics supported by a voluntary agency are described for the District of Lushoto in Tanzania. The high cost of the mobile teams, operational difficulties, and the need to integrate the services into the district health services prompted the development of a new concept. On an experimental basis, young child clinics were integrated into the day-to-day operation of dispensaries. A mobile supervisory team supported the stationary clinic and the dispensaries. This new operation cost considerably less than did the

equivalent mobile services. From the evidence obtained, it appears that stationary clinics can be at least as effective as mobile clinics. (Revised author abstract.)

1026 **Mwangemi, P.M.** *Personal view.* East African Medical Journal (Nairobi), 49(9), Sep 1972, 696-697. Engl.

A 5th-year medical student describes his 2 weeks spent with the Isiolo District Mobile Medical Unit, eastern Kenya. The first mobile clinic in the country was established in 1969 by the Methodist Church, and its aim has been to provide basic medical care for mothers and children in particular. The Isiolo unit is staffed by a British doctor and nurse, but it is intended that a Kenyan medical assistant will eventually run the unit, under part-time supervision. The author concludes that the mobile medical unit is a successful project with high attendance figures and that the scheme should be expanded into the northern districts of Kenya where the nomadic population especially would benefit from a health service such as this.

1027 **Sadasivaiah, K., de Magry, S.** *Role of mobile training teams in an educational programme in mission hospitals.* Journal of the Christian Medical Association of India (Mysore), 45(10), Oct 1970, 586-587. Engl.

To aid mission hospitals in promoting the Indian national family planning programme, the Christian Medical Association of India (CMAI) established a mobile teaching team made up of a social scientist, a nurse educator, and a doctor. The team visits hospitals in each region to educate hospital staff in the importance of family planning and the need to integrate a family planning programme within the health care system. A knowledge of the community and an understanding of human behaviour are deemed essential on the part of team and hospital staff if they are to successfully motivate patients to accept family planning; hence the need for a social scientist. The role of knowledgeable and effective communication in training is also emphasized.

1028 **Saxena, S.** *Mobile pediatric service.* Indian Pediatrics (Calcutta), 9(11), Nov 1972, 641-642. Engl.

A mobile pediatric service for India to bring the urban pediatrician into contact with the rural child is proposed. Essentially a minihospital on wheels, its equipment would include commonly used drugs, an immunization kit, emergency equipment, facilities for simple diagnostic techniques, provisions for an under-fives' clinic, folding furniture, and a medical records system. Staff would comprise a trained pediatrician, one postgraduate student, one intern, and four undergraduates, plus a pediatric nurse. This mobile hospital would visit nearby villages with a population exceeding 1 000, spending 1 day in each. Services would include health education (involving parents), emergency care, immunizations, an under-fives' clinic, and treatment of malnutrition, dehydration, and minor ailments. Serious, complicated, or clinically interesting cases would be transported to the base hospital. Once the scheme were established and parents convinced of its efficiency, limitation of family size would be encouraged.

1029 **Tahiliani, N.D., Kumar, P., Mittal, V.N.** *Initial experiences in a mobile hospital.* Journal of the Indian Medical Association (Calcutta), 60(2), 16 Jan 1973, 66-68. Engl.

A project to recast Indian medical education failed because two fundamental elements – adequate financial support and continuity of care – were disregarded. In a desire to prepare graduates for practice in rural areas, a 50-bed mobile unit, affiliated with the medical college in Allahabad, India, was set up in tents on the campus of Handia Polytechnic. The hospital comprised three main wards, X-ray and laboratory facilities, isolation and maternity wards, and an operating theatre. One medical officer was permanent and other professional staff were rotated weekly. The medical students and the resident were rotated each month as were the nursing staff and students. (There was no anaesthetist.) Students were divided into two groups, one group attached to the rotating surgeon and one to the rotating physician. Problems developed because sufficient funds and drugs were not available; postoperative follow-up proved difficult because of rotation; and students were unable to keep up in their studies.

1030 **Toufic, N.** *Lutte antitrachomateuse dans les pays Francophones de l'Ouest Africain. (Trachoma control in French-speaking West Africa).* Bulletin de la Societe de Pathologie Exotique et de Ses Filiales (Paris), 63, Jan-Feb 1970, 21-27. Fren.

In 1961, the Organisation de Coordination et de Cooperation pour la lutte contre les Grandes Endemies (OCCGE) launched a mass campaign in French-speaking West Africa to control trachoma. Mobile ophthalmic units visited endemic areas, particularly in the Ivory Coast, Dahomey, Mali, and Niger. They systematically screened the population for trachoma and conjunctivitis; distributed free aureomycin ointment (3%) for treatment; and treated surgically those who suffered from advanced trachoma. Since prophylaxis primarily depends on an understanding of the way ophthalmic infections are transmitted, this information was broadcast over the radio through slogans. Until 1966 a total of 575 localities had been visited; 45 164 cases of trachoma were detected in 244 154 examinations, and the 38 489 cases in the active stage were treated. Surgical intervention corrected 4 532 cases of advanced trachoma. Since that time the programmes have been administered nationally with the help of OCCGE-trained sanitary attendants.

1031 **UNICEF, New York.** *UNICEF aid programmes for children on the African continent.* New York, United Nations Economic and Social Council, 3 Jan 1963. 22p. UN/E/CN.14/213. Engl.

Economic Commission for Africa, Fifth Session, Leopoldville, Feb-Mar 1963.

This paper, prepared for the Fifth Session of the Economic Commission for Africa, 1963, discusses UNICEF aid to Africa. It includes a summary of UNICEF aid and a list of currently assisted projects. Other topics discussed are the role of African governments and United Nations agencies in projects; UNICEF field officers; basic health services; disease control; nutrition; family and child welfare; educational and vocational training; and future trends and prospects. The change in the nature of UNICEF's role – currently that of coordinator of the huge volume and variety of technical and financial assistance available to African governments today – is pointed out. New trends in programming tend toward the long-term, as shown by the priority given to training programmes. UNICEF commitments and allocations are documented by country and type, up to December 1962, and a diagram depicts UNICEF's field offices in Africa and the countries assisted by each.

1032 UNICEF, New York. *UNICEF aid to child health and welfare projects on the African continent.* New York, United Nations Economic and Social Council, 9 Jan 1962. 23p. UN/E/CN.14/155. Engl.
Economic Commission for Africa, Fourth Session, Addis Ababa, Feb-Mar 1962.

This paper outlines the activities of UNICEF in African countries from its inception until the end of 1961. It includes a general progress report on programmes in basic health services, disease control, health manpower training, nutrition, etc., that were receiving UNICEF assistance. It also lists the financial contributions to UNICEF from different African countries (December 1961), and UNICEF aid to Africa for training projects and for long-range child care programmes (1961). There is also an overall analysis of UNICEF financial assistance to Africa by recipient country and purpose of aid (January 1962).

1033 UNICEF, New York. *UNICEF aid to child health and welfare projects in Africa.* New York, United Nations Economic and Social Council, 27 Jan 1961. 6p. UN/E/CN.14/75. Engl.
Economic Commission for Africa, Third Session, 27 Jan 1961.

This paper, prepared for the Third Session of the Economic Commission for Africa, 1961, contains a complete listing of all projects aided by UNICEF and a summary of all project assistance approved for Africa during the period 1947-60. Initially, such aid was concentrated on mass campaigns against the great endemic diseases; today it is turned toward the establishment of permanent health services and usually takes the form of training aid. A fundamental UNICEF policy – that of "matching" – requires that the host country make local provision of supplies, buildings, labour, and personnel and take full responsibility for project administration. UNICEF's relationship with other UN agencies, the different types of aid it allocates, and the approximate percentage per type are briefly outlined.

1034 van Etten, G. *New strategies of rural health development in Tanzania.* Tropical and Geographical Medicine (Haarlem), 23, Dec 1971, 393-398. Engl.

Analysis of medical problems in developing countries is too often quantitative in nature, i.e., related to a lack of manpower, money, and facilities; the kind and quality of care offered by existing institutions and training of medical personnel are often overlooked. This paper discusses recent changes in Tanzania's health care services, based on a qualitative reorganization. In the first and second five-year plans (1964-69 and 1969-74), the trend has been to encourage the extension of health care to rural areas through a rural health centre policy and to place more emphasis on the preventive aspects of medicine. Prior to this, people had depended on outpatient clinics and dispensaries for purely curative forms of medicine, such as first aid treatment. Changes are now being carried out through a village health service, in which preventive and curative aspects are combined and implemented by an auxiliary category known as "village medical helpers"; a mobile health service, which consults with district village leaders in order to deal with particular local needs; and the establishment of new schools for training rural medical aides.

1035 Wolfenden, G. *Mobile health units in West Suk.* East African Medical Journal (Nairobi), 37(3), Mar 1960, 232-236. Engl.

A mobile health unit serves the needs of nomadic cattle herders of West Suk, Uganda. Visits by the unit are scheduled to regular lunar intervals, usually at trading centres. Clinic attendance is rising, indicating an increased awareness on the part of the Suk of the advantages of modern medicine. One advantage of the mobile unit is that it gives the staff an indication of the incidence of prevalent diseases and where best to concentrate preventive efforts. However, the unit inevitably falls short in this area. Visits are infrequent, and efforts must be concentrated on the curative aspect, although staff do attempt to explain the preventive measures for each complaint encountered and to give talks on basic aspects of hygiene. Even treatment is incomplete, as follow-up is impossible to assure in a 2-3-day monthly visit; many die from acute, but curable, diseases between visits. These drawbacks could be overcome by the establishment of dispensaries or health subcentres manned by dressers and visited by the unit at regular intervals. Health scouts, trained in basic hygiene and the recognition of infectious disease, could report disease outbreaks to the unit in the future.

1036 Zahran, M. *Incremental dental-care program for primary school children in Egyptian rural area. Results of two years study.* Journal of the Egyptian Public Health Association (Cairo), 43(special number), 1968, 130-140. Engl.

This mobile dental scheme aims at improving the oral health of a rural population near Cairo by utilizing dental manpower efficiently. A survey of 7 673 school children aged 6-13 provided the data on which a comprehensive dental care programme was instituted. The service is provided through the use of a mobile dental bus that visits all 24 primary schools in the area. Although insufficient time has elapsed to assess the scheme thoroughly, it is apparent that the mobile service has at least motivated children to accept dental services willingly.

III.4 Community health education

See also: 0921, 0926, 0957, 0982, 0985, 0987, 1092, 1146, 1161, 1168, 1177, 1250, 1264, 1272, 1327, 1350, 1361, 1370

1037 **Ambe, R.J.** *Gastroenteritis in the rural areas.* Nigerian Nurse (Lagos), 4(4), Oct-Dec 1972, 6-9. Engl.

Gastroenteritis, an inflammation of the mucous membranes of the stomach and small intestine causing diarrhea and vomiting, is prevalent in rural Nigeria. Conditions that foster the disease's propagation are briefly described. Education of the public is fundamental to the prevention and control of this disease. Proper disposal of house refuse and human waste, proper food hygiene, and a pure water supply are recommended.

1038 **Aronson, M.D., Sasser, C.G., Aronson, J.L.** *An approach to health in Latin America.* Military Medicine (Washington, D.C.), 137, Jun 1972, 221-223. Engl. 15 refs.

Health planning in developing countries should coordinate engineering, educational, agricultural, and medical services, and the medical component should emphasize prevention. These two principles were incorporated by the Third Civil Affairs Group into its project in Nuevo Caimitillo, Panama. This rural community of 200 people serves as centre to a surrounding population of 1 000 and is supported by subsistence farming. Before the project began, the harvest was usually small, because insecticides and fertilizers were virtually unknown. A contaminated water supply and poor hygiene caused 70% of the population to suffer from intestinal parasitism. To combat all these problems, the Civil Affairs group began a health education programme, using films, pamphlets, and lectures, and set up productive farming techniques in an experimental garden. They also brought in engineers who devised a rainwater collection system. Although it was too early to evaluate the project, follow-up study has been planned.

1039 **Bangladesh Academy for Rural Development, Comilla.** *Two year's plan for pilot public health programme in Shalbanpur Village in Comilla Kotwali Thana.* Comilla, Bangladesh Academy for Rural Development, n.d. 3p. Engl. Unpublished document.

This brief outline presents the objectives and mode of operation of the pilot health project in Shalbanpur Village, Bangladesh. The project is sponsored by the Bangladesh Academy for Rural Development and supported by UNICEF. A health committee, consisting of a district health education officer and representatives from the Women's Programme and the Agricultural Cooperative Federation, will be responsible for policy-making and activities review. Members of the Women's Programme will supervise day-to-day activities. A study of the present health condition of the people and the village will be made to determine their needs. Then, programmes in home sanitation, maternal and child health, nutrition, communicable disease control, and health education will be implemented. After 2 years, the experiment will be systematically evaluated to assure its viability as a method of health care delivery.

1040 **Bennett, F.J.** *Planning of health education.* Journal of Tropical Medicine and Hygiene (London), 65, Nov 1962, 282-283. Engl.

Since health education aims at modifying a life-style to make it conducive to good health, the success of a health education programme depends on prior knowledge of that life-style. Wide variations in cultural, social, and economic situations in East Africa necessitate different approaches to health education. Four steps in planning a health education programme are outlined: (1) delineation of the programme content and classification of its objectives; (2) determination of procedures to achieve objectives, and assessment of available resources, their integration, and costing; (3) formulation of timetables for activities; and (4) delineation of evaluation criteria. Often pilot projects are needed to determine the appropriateness of an approach to a particular setting.

1041 **Bennett, J.** *Health education.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.6. 13p. Engl.

See also entry 785.

The aim of health education is to alter behaviour where it causes disease and to encourage adoption of preventive measures at both individual and community levels. This is a function of all medical staff, and their training should impress upon them their role as teachers. The first step in the education process is to study health practices and beliefs of a local community and then to introduce a coordinated programme to modify the harmful aspects, placing emphasis on the personal approach rather than on impersonal techniques such as posters. The hospital patient is a convenient and effective target for health education since on discharge the patient will disperse his acquired knowledge throughout the community. Education can also exert its influence through community activities such as schools, women's clubs, development committees, and the church, and through properly advised traditional local healers.

1042 Bhatia, D. *Health education: theory and practice.* Indian Journal of Public Health (Calcutta), 11(3), Jul 1967, 141-144. Engl.

Since many health measures require voluntary individual and community action, the emphasis in health programmes is slowly changing from control of the environment to individual and community education. Unfortunately this change has not yet been reflected in the number or curricula of public health institutes in India. Since 1947, the number of medical colleges has increased from 20 to 87, but there has been no corresponding expansion in schools of public health. Training schedules in public health institutes need drastic revision and strengthening, with emphasis on behavioural and social sciences. It is important that health education permeate all levels of society, enlisting government departments, voluntary organizations, local bodies, elected leaders, etc. as health educators. In family planning especially, where shyness hinders progress, it is important to involve the community and its leaders in discussion.

1043 Bogolepova, L.S., ed(s). USSR, Ministry of Public Health. *Sanitarnoe prosveshchenie: sbornik po voprosam organizatsii, soderzhaniya i metodiki sanitarno-prosvetitel'noi raboty. (Health education: collected articles on the organization, content, and methods of health education work).* Moscow, Ministry of Public Health, Central Research Institute of Health Education, 1968. 150p. Russ.

This booklet comprises 15 papers on health education, most of which refer to experiences within the USSR. Some are concerned with the spreading of knowledge on particular subjects, e.g., prevention of nutritional diseases in children, antenatal protection of the fetus, and occupational health. Others are concerned with general aspects such as staff teaching standards, organization of health education in certain African countries, and research into the health knowledge of rural populations. Most articles are accompanied by diagrams, illustrations, statistical data, and references.

1044 Brady, F.J. *Role of the individual in rural health.* In Long, E.C., ed., Health Objectives for the Developing Society: Responsibility of Individual, Physician, and Community, Durham, N.C., Duke University Press, 1965, 76-90. Engl.

The author describes the two potential roles of the individual in health – his responsibility for his own and his family's health, and his responsibility toward the community for the development of health programmes within it. He also distinguishes between the rates at which a rural individual in the USA and a villager in a developing country will adopt new health practices in view of their differing social circumstances. Although the former may respond to health messages broadcast over the media and through school education programmes, the latter needs health development to be closely coordinated with other social and economic development plans. Large international agencies can contribute greatly to development, but the author believes that a social scientist is needed to help overcome cultural barriers in primitive societies. As for the influence of the rural individual on community health programmes, the qualifications necessary for effective leadership – willingness to acquire knowledge, unselfish motivation, ability to influence others, readiness to seek professional guidance – are unlikely to be found in an individual member of a primitive village. In such a community, any attempt to introduce modern health procedures will fail unless preceded by years of preparation or perhaps the dramatic eradication of a disease by visiting medical personnel. The author believes, therefore, the best potential for rural health improvement in most areas of the world rests with the local ministries of health, given the consultation and guidance of the world's experts available through international organizations.

1045 Caribbean Food and Nutrition Institute, Kingston, Jamaica. *FFHC Nutrition Education Evaluation Project (Lambs River Project): report for period 1 Aug 1972-15 Feb 1973.* Kingston, Jamaica, Caribbean Food and Nutrition Institute, 1973. 9p. Engl.

This is a progress report on the work of the Nutrition Education Action Committee (NEAC), which has been responsible for coordinating and stimulating educational activities in Jamaica, on the Lambs River project during a 6-month period. Project activities included: nutrition education in schools; cultivation of school gardens (tended during a portion of school time officially designated for gardening); seed distribution; establishment of relations with two important agricultural bodies (resulting in financial assistance for two livestock schemes); training sessions for home visiting volunteers; and a nutrition seminar for teachers, volunteers, and health personnel. The present steady and unhurried programme development could be stepped up by the addition of a public health nurse and an agricultural extension officer. Data are being collected on a continuing basis for future evaluation of the project.

1046 Fountain, D.E. Christian Medical Commission, World Council of Churches, Geneva. *Programme of rural public health: Vanga Hospital, Republic of Zaire.* Contact (Geneva), 13, Feb 1973, 2-14. Engl.

In 1969, the Department of Public Health, Vanga Hospital, Republic of Zaire, was created in response to a long-recognized need for public health in this region. Preventable diseases (intestinal helminths, malaria, malnutrition, tuberculosis, measles, tetanus, poliomyelitis) had been responsible for half the pediatric admissions and were prevalent among the adult population. The various programmes undertaken by the department are described: rural sanitation via health education; mass worm cure; family health through monthly family health clinics; malaria treatment; nutrition education; and tuberculosis control. The support of village chiefs and elders was enlisted through seminars conducted by medical and church leaders, and thus the villagers have been motivated by their own leaders. The

programmes have had encouraging results in the 80 villages where they have been implemented. The number of hospital admissions has been reduced, general health has improved, and, most important, a genuine desire for better health has developed among the people. Statistical evaluation of results is needed and is currently being undertaken by three Peace Corps volunteers. Overseas support presently pays for about 40% of operating costs; patients are charged small amounts for services and packaged medicines. The department hopes to make the programme self-supporting in the future.

1047 **Fuglesang, A.** Dag Hammarskjold Foundation, Uppsala, Sweden. *Applied communication in developing countries: ideas and observations.* Uppsala, Dag Hammarskjold Foundation, Sep 1973. 124p. Engl.

This report includes the papers and proceedings of a seminar on the role of communication in social and economic development. Communication is essential to such activities as agricultural extension, community development, public health, family planning, nutritional programmes, and general information services. The objective of the seminar was to assist development workers in maintaining dialogue with the people, in order to plan activities and make decisions based on feedback from them. Report contents include accounts of information activities concerning development cooperation between developed and developing countries, models of communication services, and management of communication services. An evaluation of the seminar by its participants is also included.

1048 **Gideon, H.** Christian Medical Commission, World Council of Churches, Geneva. *Population programmes in community health care.* In Christian Medical Commission, Annual Meeting 1972, Geneva, Christian Medical Commission, 1972, 21-27. Engl.

See entry 835 for complete proceedings.

The Christian Medical Commission considers that population concerns and community health are best tackled as one. Outlined here is a specific approach to community health through a programme of community self-awareness and participation in problem solving. Implementation of the programme begins with the selection of a hospital already practicing some form of community health activity and/or having trained personnel such as the initial staff (medical officers and community nurses). These personnel are oriented, through discussion, practical field work, and visits to community projects such as Koje Do (Korea) and Jamkhed (India), to assume responsibility for community health. Lower-level health workers are trained to make up the rest of the health team. Once the community has been selected, examined, and its problems defined, leaders (e.g., teachers, priests, retired servicemen, members of local government, etc.) are selected from the community to help assess priorities, provide further factual information, and discuss the best way of approaching community education. Meetings, organized by the community leaders, are to be held regularly. Constant programme evaluation and dialogue between the health team and the community leader are emphasized.

1049 **Jara, J.B.** Chile, National Health Service. *Agua: salud para los Mapuches de Chile. (Water: health for the Mapuche Indians of Chile).* Temuco, Chile, Zone 10, National Health Service, May 1965. 17p. Span.

Unpublished document. See also entry 783.

The purpose of the Basic Rural Sanitation Plan is to provide the Mapuche Indians with suitable drinking water, toilet facilities, and a better method of garbage disposal. This group, who represent about 20% of the total population of the Malleco and Cautin provinces in Chile, have not benefited medically from advances of civilization due mainly to fear and their intrinsic isolationism, reinforced by laws that have kept them in a dormant state. An anthropologist of the University of Chile was successful in interesting the local chieftain in a water pump and water-closet facilities. Several committees were created in different areas under the direction of the anthropologist and the number of installations of water pumps and toilet facilities multiplied rapidly. Although they accepted the water pump quite readily, the Mapuches did not take to the water closet; finally, the National Health Service offered both in an indivisible package. Construction of these facilities is being carried out by teams made up of six individuals and supervised by an inspector; the responsibility for the implementation of the plan rests with a civil contractor. Tables show how the plan has worked in terms of numbers of units installed, equipment in use (supplied by UNICEF), and contributions of the National Health Service. The author describes the immediate health benefits to be derived from the plan and explains how the availability of water has changed the diet of the Mapuche Indians by enabling them to cultivate vegetables.

1050 **Journal of the Indian Medical Association, Calcutta.** *Health education.* Journal of the Indian Medical Association (Calcutta), 48(10), 16 May 1967, 505-506. Engl.

Editorial.

To control communicable and preventable disease in developing countries, the individual and the community must participate. People, however, must be convinced of the importance of good health before they can be expected to alter their behaviour in order to get it. This paper discusses some points to consider in health education planning. These include: factors that influence people's attitudes toward learning; the existing social, cultural, ethnic, and linguistic situation; and the economic value resulting from proper use of health services.

1051 **Kark, S.** *An approach to public health.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.5. 10p. Engl.

See also entry 785.

A public health service should comprise "community diagnosis," a "community health action programme," and adequate follow-up and evaluation. First, diagnosis should be undertaken by collecting epidemiological data from a defined area, making inferences about the disease-producing factors at work in the community, and determining the capacity for change in the critical, health-related cultural practices. A coordinated programme of appropriate action (health education, immunization, legislation, etc.) should then be directed toward the welfare of particularly susceptible groups and must operate at the individual, family, and whole community levels. It is important to realize that community health action should be directed not by the professional staff but by the community's own natural leaders (especially primary schoolmasters). These concepts of community diagnosis, action, and evaluation are illustrated in the chapter by referring to kwashiorkor.

1052 Kaur, R.A. *Education and its impact on rural health.* Journal of the Indian Medical Association (Calcutta), 40(6), 16 Mar 1963, 285-289. Engl.

The author, addressing the 16th general assembly of the World Medical Association held in India, outlines the present level of health in India and compares it to that in 3000 BC and in 1947 after independence. He draws upon his 10 years experience as minister for health and upon the teachings of Gandhiji. He concludes that only through health and education services can India's rural populations become productive, but acknowledges the difficulties in introducing quality education because of the low professional status and pay afforded to teachers. He calls upon the medical profession to heed the concept of service to humanity that underlies the Hippocratic oath and to "strengthen the people's voice in demanding what are the birthright of every child, education to prepare him for a complete life and health to enable him to live that complete life."

1053 King, P.E. *Health education in rural health practice.* Nagpur, India, Christian Medical Association, Christian Nurses League, Sep 1966. 5p. Engl.

The psychology of cultural change is discussed in the context of health education in India. Early attempts to convince people to adopt a certain behaviour, for the good of their health, failed because there was no built-in mechanism for dealing with custom and social pressure for conformity. One of the most successful ways of promoting acceptance of a new behaviour is by introducing it to the upper classes first, as people tend to accept and imitate those of a higher status. The health educator must have an understanding of the patient, his social setting, and the general principles of human behaviour; new behaviour can then be related as a means to something of importance (i.e., increased social status) in the life of the person being educated and is thus more likely to be adopted.

1054 Konotey-Ahulu, F.I. *Taking health to Ghanaians.* AFYA (Nairobi), 5(12), Dec 1971, 5-8. Engl.

A doctor from Ghana gives a brief progress report on that country's health situation – the advances that have been made and the ground yet to be covered. He cites some interesting statistics: only 30% of the population are over age 30, and more than half are not yet 20; of the 190 emergency admissions during one rainy season 44% could have been prevented by ordinary public health measures; and the crude birth rate is 47 per 1 000 with an increase of 2.5-2.8% per year in a population of 8 million. Fortunately, the need for public health measures has been recognized: the 1 200-strong health auxiliary force is being increased and its functions expanded; an infrastructure of health centres and posts has been set up to serve rural areas; the physician curriculum now includes an immediate postregistration period of epidemiologic work in the field; and the Danfa project, a comprehensive rural health programme, is now being used to test the hypothesis that reducing infant morbidity and mortality is the best way to encourage families to have fewer children. Further efforts to persuade expatriate doctors to come home, to discourage the practice of polygamy, and to educate the public away from "medicine-consciousness" and toward public health consciousness are mentioned.

1055 Mills, M.L. *Health education in a Cambodian village.* Public Health Reports (Washington, D.C.), 83(11), Nov 1968, 893-898. Engl.

During 1950-61, a U.S. public health nurse adviser, during her spare time, helped organize community projects in a small village 50 miles from Phnom Penh (Cambodia). As lack of clean drinking water and poor sanitation were the main problems, a village well was drilled with the help of a U.S. Operations Mission to Cambodia, and a latrine was constructed for each family. A weekly family health education conference was started to provide simple instructions about hygiene, child care, and prevention of disease. With planning and financial aid from Americans assigned to U.S. government missions, the villagers later constructed a community centre to be used for teaching, demonstrations, and health conferences. A request for medical assistance prompted the Cambodian Ministry of Health to assign a health officer to the village and to provide occasional services of doctors from the capital. This was the first time that the ministry had provided health services at the village level.

1056 Minkowski, A. *Health care in China and the West.* Hospital Practice (New York), 9(7), Jul 1974, 138-146. Engl.

The success of the philosophy and organization of health services in the People's Republic of China is described. The practical use of paraprofessionals (barefoot doctors and midwives) provides basic health services to all members of society, and the maternal health care services and statistics on the premature birthrate are among indicators that suggest China's health status compares well with that of the West. Because each

woman's reproductive status, menstrual cycle, and method of contraception are public record and are regularly updated, a programme of prenatal care is feasible beginning almost at conception. Newborns enter into an immunization regimen similar to that practiced in the West, and participation rates approach 100%.

1057 **Montemayor, J.U.** Christian Medical Commission, World Council of Churches, Geneva. *Community activation in health care and development: planning and participation.* In Christian Medical Commission, Annual Meeting 1971, Geneva, Christian Medical Commission, 1971, 35-43. Engl.

See entry 839 for complete proceedings.

The author uses Christian doctrines to suggest ways of motivating health workers in community health programmes. He stresses the need to instill a sense of self-confidence and self-reliance in the people; to assist in discovering local medicinal herbs and other curative resources as a means of reducing costs of drugs; to be receptive to alternative suggestions; and to encourage the people to form self-help organizations.

1058 **Seipp, C.** *Role of the community in rural health.* In Long, E.C., ed., Health Objectives for the Developing Society: Responsibility of Individual, Physician, and Community, Durham, N.C., Duke University Press, 1965, 103-122. Engl.

The author discusses the relationship between the government, the physician, and the community, particularly how this relationship influences the development of health services in Latin America. First the health problems of the individual community must be identified; here the professional judgment of the physician who sees the value of preventive health measures must be reconciled with the less-developed technical awareness of the consumer public that seeks direct medical attention. The health professional must, therefore, serve as teacher and leader to raise this level of awareness in the community and hence increase its potential for self-help. Health planning should be practiced at the local as well as the national level; plans must aim to increase the public's ability to utilize available resources, i.e., to develop self-reliance. Inefficiencies in existing systems and services should be remedied by administrative changes. The training of health professionals should be geared to preparing them for work in rural communities. Finally, a decentralized organizational framework operating at the regional as well as the national level is needed to improve the distribution and delivery of health services.

1059 **Srivastava, P.K.** *Experience of rat poisoning programme in a rural area of Uttar Pradesh.* Indian Journal of Public Health (Calcutta), 15(3), Jul 1971, 100-102. Engl.

A rat control programme was conducted with success in Tikra, India; cooperation of Tikra's villagers, achieved through extensive education, was largely responsible for the total coverage of the programme. Poisoned baits were placed in the houses; later, the houses were inspected, the rats removed, and the findings recorded. Initially an anticoagulant poison (Rodafarin) was used, followed by an acute poison (zinc phosphide) to wipe out the residual rat population. The programme was appraised according to both the villagers' comments and the remaining rat density (measured by setting traps inside the houses). Data on estimated rat densities during pretreatment, treatment, and posttreatment are set forth in a table. It is concluded that an integrated approach such as this is effective for a considerable time.

1060 **Toufic, N.** *Medecine educative au service de la lutte contre le trachome. (Health education in trachoma control).* Revue Internationale du Trachome (Marseille), 46(2), 1969-1970, 119-150. Fren.

In view of the prevalence of preventable eye infections (trachoma, conjunctivitis) in tropical Africa, the need for a widespread social ophthalmic education programme is undeniable. Outlined in this paper is a detailed methodology for such a programme. Included in the discussions are: the reasons for resistance to change; existing services and institutions, both formal and informal, through which such a programme could be channeled; fundamental notions to be disseminated regarding eye diseases and hygiene; the training of paramedical personnel for such work; methods of reaching the public; and the use of audiovisual equipment, radio and television, and African culture and folklore as vehicles for education.

IV. Primary Health Manpower – Training and Utilization

IV.1 Primary medical care

IV.1.1 Professional

See also: 0708, 0724, 0725, 0727, 0733, 0734, 0749, 0755, 0768, 0796, 0801, 0812, 0886, 0891, 0892, 0893, 0965, 1008, 1016, 1019, 1029, 1058, 1106, 1269, 1277, 1284, 1287, 1288, 1296, 1362

1061 **Abel-Smith, B., Ekholm, L., Klarman, H.E., Rojo-Fernandez, V.** *Can we reduce the cost of medical education?* Indian Journal of Medical Sciences (Bombay), 27(2), Feb 1973, 173-184. Engl. 38 refs.
Appeared also in WHO Chronicle (Geneva), 26(10), Oct 1972, 441-450.

Establishing a medical school requires a major investment, and before a decision is made to create one, the long-term economic and financial implications and the available alternatives should be thoroughly studied. It is easy to underestimate the real cost of medical education by failing to include in the calculation the high costs after graduation – salary, sophisticated equipment, expensive facilities, and support staff. Also misleading is the assumption that an efficient health care system will be achieved simply by improving the doctor-to-population ratio. Will there be enough high school graduates available for training? Will it be possible to ensure even distribution of new doctors throughout the country? Will they be able to cope with the primitive conditions in rural areas? Alternatives to establishing new medical schools would include expansion of existing facilities (perhaps across national boundaries) and more emphasis on training lower-grade personnel – they are less costly to train and can quickly provide full coverage of the country. When a new medical school is required, the key to economy is to make maximum use of any buildings, facilities, and staff that are available locally and to ensure that the content of the training course and its presentation are relevant to the country's needs.

1062 **Acheson, N., Stevens, J., Tait, I.** *General practice experiment: technical aid to developing Africa.* British Medical Journal (London), 2, 16 Oct 1965, 927-929. Engl.

Despite the willingness of the British government to aid her ex-colonies in developing their medical services, few physicians are willing to implement these good intentions by serving as general duty medical officers. This is a report on the experiences of three general practitioners who did leave their rural practices in England to serve in Malawi and Swaziland. They recommend that the physician contemplating working in Africa receive training in the following skills: safe anaesthesia, lower-segment caesarean section, scalp-vein transfusion (for infants in a state of shock and dehydration), painless whole-tooth extraction, and postmortem examination. Traumatic injuries are common, the result of modern farm machinery in untrained hands. Obstetric problems and childhood malnutrition are also prevalent.

1063 **Argentina, Ministry of Social Welfare.** *Programa de cursos de capacitacion de personal para el sector salud. (Programme of training courses for personnel in the health field).* Buenos Aires, Ministry of Social Welfare, Jun 1974. 45p. Span.

Argentina's Ministry of Social Welfare has compiled information on training and/or upgrading courses for 42 different cadres of health worker. Twenty-two are professional cadres, 13 technical, and 7 auxiliary. Information on each course includes its objectives, organization, duration, cost, entrance requirements, etc., and an address from which further information can be obtained.

1064 **Argentina, Ministry of Social Welfare.** *Primer seminario del Departamento de Recursos Humanos e Investigacion sobre educacion medica continua. (First seminar of the Department of Human Resources and Research on continuing medical education).* Buenos Aires, Ministry of Social Welfare, 1972. 39p. Span. 10 refs.

This seminar held in Buenos Aires, Argentina, in 1972 defines continuing medical education as a formative process to upgrade the technical or professional qualifications of each health team member from the moment he obtains a license to practice until the end of his professional life. Since its ultimate goal is to improve health conditions in a particular country or region, continuing education must be geared to those health needs. The characteristics, objectives, content, and methodology of continuing medical education programmes are discussed in general; two model programmes, one applicable to cities of up to 20 000 inhabitants, and the other to rural areas, are presented. The method for the

latter (conceived with a certain rural area – Catamarca, Argentina – in mind) includes identifying the objectives, diagnosing the problems, studying the resources, and implementing and evaluating a programme. Finally, the report recommends that a working committee be established to institutionalize this educational concept in Argentina.

1065 Bhattacharjee, B.N. *Training programme for the medical officers.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 1-9. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

A training programme has been set up in India to help prepare medical officers for the delivery of integrated health services through the primary health centres. The programme's curriculum includes the following topics: public health administration, epidemiology, environmental sanitation; maternal and child health and family planning; school health; medical care; maintenance of equipment; and specific administrative and technical problems. Four courses of 4 weeks each are given per year. The 25 trainees admitted per course receive a stipend (20 rupees per day) for its duration. The syllabus for the training course is appended.

1066 Bhattacharjee, B.N. *Future need for training medical officers and paramedical workers for rural health services in India.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 19-22. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

As a result of the concentration of doctors in urban centres in India, large numbers of the rural primary health centres are vacant. The reasons underlying this maldistribution of physicians are five: (1) primary health centres are responsible for too large a population; (2) the needs of these populations are not properly assessed; (3) medical and paramedical personnel are not provided with basic amenities, i.e., latrines, potable water, electricity, educational facilities for their children, etc.; (4) provision of drugs is inadequate; and, most important of all, (5) the doctors' medical education does not prepare them for the task of serving in a poor rural community. Rural health in India, the author points out, depends on health education, preventive measures, and emergency medical care. He suggests that doctors be given a brief orientation before they go to rural posts. He further advocates the establishment of a new cadre of auxiliary health worker, similar to those in some socialist countries, for deployment in rural areas. Statistical data on physician distribution, numbers of medical graduates, and numbers of training institutions are included.

1067 Buri, P., Buri, R., Khanjanasthiti, P., Bryant, J., Stewart, M., Wray, J., Phanchet, S. Mahidol University, Ramathibodi Faculty of Medicine, Bangkok. *Ramathibodi community health program: background and development.* Bangkok, Mahidol University, Ramathibodi Faculty of Medicine, Apr 1972. 19p. Engl.

The Ramathibodi community health programme, Mahidol University, Bangkok, Thailand, was the result of a realization that present medical education was not preparing the rural health team to meet the needs of the population. Despite the underutilization of health centres by the people, government health personnel (especially physicians) were reluctant to carry services out of the health centre and into the community. As manpower and facilities were limited – health centres had been implemented in only 260 of the country's 550 rural health districts – optimum use of existing resources was mandatory. Therefore, the Faculty of Medicine and the Ministry of Health created a community health team to design and continuously evaluate an interdepartmental programme aimed at comprehensive health care. The result was the Ramathibodi community health programme. A rural district about an hour's drive from the university was selected as a rural teaching and research centre where students could acquire practical experience in problem-solving. A notable feature of the programme is that students are not educated in isolation; since it is recognized that members of the health team must function as a well-coordinated unit, all categories of personnel have access to the teaching centre. The programme's philosophy, objectives, development, organization, and administration are outlined.

1068 Buri, P., Buri, R., Phanchet, S., Khanjanasthiti, P., Limsuwan, A., Bryant, J., Stewart, M., Wray, J. Mahidol University, Ramathibodi Faculty of Medicine, Bangkok. *Ramathibodi community health program. II: teaching activities.* Bangkok, Mahidol University, Ramathibodi Faculty of Medicine, Nov 1971. 29p. Engl.

The teaching activities of the Ramathibodi community health programme, Thailand, were designed to prepare the student for his role as district health centre physician and leader of the health team. They are aimed at providing him with conceptual and analytic tools for critically examining the needs of a defined population and for developing programmes to meet these needs. The five courses in community health are described: (1) "Health and Demographic Survey" offers the student practical experience in survey techniques and community diagnosis as well as providing data on the health of a selected rural population (samples of questionnaires and survey results are included); (2) "Analysis of Community Health Problems," a critical examination of data collected in the first course, is oriented toward problem-solving and encourages students to think of health care delivery as a system that can be altered if need be; (3) "Community Health Planning" initiates students into community health concepts, especially those most relevant to Thailand;

(4) "Clerkship in Community Health" requires that students assist for 6 weeks at a rural primary health centre; and (5) "Internship Rotation in Community Health" comprises 1 month internship at the university hospital, where the student learns the many nonclinical responsibilities of the rural health centre physician. It is emphasized that the curricula are constantly being discussed, evaluated, and modified by the community health team.

1069 **Campos, P.C.** *Philosophy and objectives of the comprehensive community health program.* Quezon City, University of the Philippines. 70p. Engl. 8 refs.

The author describes the administration and organization of a community-based health care system for the Philippines. This system would embrace preventive, curative, and rehabilitative aspects of health care and would aim at achieving targets in environmental health, control of communicable diseases, nutrition, MCH, health education, and primary medical care appropriate to each community. For such a service, practically trained staff who can cope with the needs of rural communities are required. Recognizing this need for more relevant training, the Department of Medicine, University of the Philippines, is introducing a comprehensive community health programme (CCHP). Using its own staff and a specially constructed community health centre, the university will provide health care to the total population of a rural municipality. At the same time, medical and paramedical students will train in the CCHP at both graduate and undergraduate levels, as will sociologists, health educators, anthropologists, etc. The CCHP will explore new approaches to public health, it will provide a model for community medicine, and it will teach the local people how they can participate in the further development of their community. The full scope, objectives, and implementation of the CCHP are reported in this booklet.

1070 **Datta, S.P.** *Note on problems of junior doctors in primary health centres and the need for orientation training.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 40-47. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

Junior doctors staffing India's primary health centres face a variety of problems for which they are not prepared. These mainly revolve around the fact that the new MDs are expected to bring comprehensive care to unrealistically large populations despite inadequate transportation facilities, medical supplies, sanitation equipment, and referral services. The author suggests, therefore, that several areas of practice are essential to the medical student's training. These include: treating common illnesses and emergencies with a limited number of available drugs, under a specialist's supervision (perhaps through a 6-month posting in the casualty and obstetric departments of a district hospital); organizing mass health campaigns; performing vasectomies; collecting common vital statistics and hospital data, and preparing maps, charts, graphs, etc. for display and evaluation; teaching health education; managing the health centre, its equipment, supplies, and records; and supervising the other personnel. Finally, the student must learn to study the attitudes, needs, traditions, and leadership patterns of the area in which he is to work in order to enlist cooperation and involvement from the community.

1071 **Datta, S.P.** *Use of health centres and other institutions for teaching in social paediatrics at JIMER, Pondicherry.* Archives of Child Health (Bombay), 11(2), Jun-Aug 1969, 85-90. Engl.

Because child care must extend beyond the hospital, training in social pediatrics should provide the medical student with the opportunity to work and study not only in the hospital but in various health centres (rural, urban, MCH, and/or family welfare centres). He will then experience a comprehensive health team approach to the child's welfare, family, and community. One such scheme is operated by the Department of Preventive and Social Medicine, Pondicherry (India). In this programme, undergraduates and interns serve at urban and rural health centres that are affiliated with the department. They treat outpatients, make home visits, attend schools, undertake projects, etc. Two appendices outline the activities to be conducted at each centre and at the department.

1072 **de Yazigi, V.G.** *Principles and factors involved in planning postgraduate training in health education for public health personnel (academic studies and field training).* Pakistan Journal of Health (Lahore), 12(4), Jan 1963, 182-192. Engl.

It becomes more and more evident that the principle of health education needs to be systematically incorporated into the training of all health professionals. Use of health education principles by all staff helps foster community cooperation. Mechanisms should be set up to permit health education training for staff already on the job. Curricula should be carefully planned and evaluated in accordance with objectives. Plans should be developed at the national level for the selection and training of health education specialists. These plans should include training for field level health education workers, and there should be a careful definition of their prerequisites, functions, and promotions in position and salary, in order to acquire personnel who will be efficient and responsible while working on the health team. Some key considerations in the implementation of these ideas are outlined.

1073 **Ebrahim, G.J., Morley, D., Lloyd, J.K., Wolff, O.H.** *UNICEF/WHO course for senior teachers of child health: can a small international group create change?* British Medical Journal (London), 2, 20 Apr 1974, 166-169. Engl.

Of the world's 500 million children under age five, 400 million live in developing countries where 97% of deaths in this age-group occur. One attempt to accelerate the evolution of child health services in the developing world is the WHO/UNICEF course for senior teachers of child health. Since 1961, 10 candidates (experienced pediatricians) from around the world annually enter the course, which comprises 20 weeks in the U.K., 3-4 weeks in West Africa, and 14-16 weeks in India. During this time, participants study methods of assessing health needs of children, especially in rural communities, and of organizing simple health care delivery systems; they also study various techniques for training health personnel (including pediatricians), construct curricula, and examine the planning, administration, and management of pediatric departments in hospitals and universities. The long-term objective of the course is to improve child health by establishing a nucleus of teachers who will contribute significantly to the overall design of child health services and the training of health personnel.

1074 **Field, M.G.** *Health personnel in the Soviet Union: achievements and problems.* American Journal of Public Health (New York), 56(11), Nov 1966, 1904-1920. Engl. 34 refs.

Physicians, feldshers, and other categories of health personnel in the Soviet Union are discussed in terms of numbers, training, specialization, working and living conditions, the role of women (in the medical profession), and the role of feldshers. At present, over one-fifth of the world's physicians are Soviets, and the physician-to-population ratio in that country is one of the highest in the world, although it varies radically internally – 27.6 per 10 000 for the urban population and 9.8 for the rural inhabitants. The physician's professional training consists of 6 years study in a medical institute or university following secondary school graduation; specialization and refresher courses may then be pursued concurrently with practice. Because of physician unwillingness to work in rural areas, many inhabitants must rely on the feldsher for medical care. As feldshers are usually peasants themselves, they are more willing to remain in the country. They receive 4 years training in a secondary medical school, and like other semiprofessional personnel, they may study toward becoming professionals. Three-fourths of all Soviet doctors and about nine-tenths of all health personnel are women. Except for a small elite in administration, research, and academic medicine, their salaries are relatively low.

1075 **French, R.M.** *Dynamics of health care.* New York, McGraw-Hill, 1968. 147p. Engl.

This textbook is intended for students in any of the health-related professions. It aims to provide them with a better understanding of the context in which they are to work – the patients, the institutions, the psychologic aspects of illness, professional responsibilities, etc. Much of its content relates specifically to the situation in the USA, but some sections have wider application. Chapter headings include: "The Patient"; "Organizational Structure of Hospitals"; "Health Services Personnel"; "Interpersonal Relations"; and "Sociologic Aspects of the Hospital." There are numerous references in each chapter.

1076 **Ghoshal, B.C.** *Teaching of community medicine in undergraduate medical education.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 37-39. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

Although current medical thought stresses prevention, India's medical institutional framework is still geared toward curative medicine and its doctors are educated in this tradition. Several objectives for medical education are proposed with a view to producing doctors who have an aptitude for work in rural areas and who will fit into the infrastructure of the health services now being planned.

1077 **Gopalakrishnan, R.** *Development of department of preventive and social medicine in the Union Territory of Goa.* Indian Journal of Preventive and Social Medicine (Varanasi), 1, Jun 1970, 227-236. Engl.

The Department of Preventive and Social Medicine at the Goa Medical College, India, now includes a UNICEF-supported rural health centre. As well as serving the medical needs of 20 000 persons, the centre functions as a training school for medical interns and student nurses. During their 8-week posting at the rural health centre, the interns actively participate in its activities by attending to emergency calls, taking part in the health education programme, and spending a week in training with the social worker, the sanitary inspector, the public health nurse, and the midwife, in the outpatient service. They conduct surveys on village health problems and take field trips to investigate sanitary conditions, working conditions, mother and child health clinics, family planning clinics, etc. Unfortunately, public health is not considered very important by either faculty or students. It is suggested that if deans, principals, and professors were given an orientation course on the concepts of cause and spread of disease, this attitude might change.

1078 **Hathirat, S.** *Problem of medical care in Thailand.* Journal of the Medical Association of Thailand (Bangkok), 56(2), Feb 1973, 125-129. Engl. 11 refs.

The author attributes the precariousness of medical care in Thailand to poor quality and insufficient quantity of medical personnel. Factors responsible for these deficiencies include: a population explosion of 3.3% per annum; an educational system that emphasizes technical and scientific know-how but fails to impart a sense of social responsibility; the brain drain; ethical and moral decline, brought about by the influx of "material civilization" from the developed countries; poor health

care planning and delivery; and poor administration. Lack of social responsibility on the part of medical personnel is reflected in the length of consultation time – a maximum of 2 minutes per patient by eight of 10 doctors surveyed. The doctor-to-patient ratio varies from 1:1 000 in Bangkok, to 1:100 000 in rural areas, while 90-100% of the positions for paramedical personnel remain unfilled. Furthermore, people are discouraged from using existing, especially governmental, services due to the inhibiting social distances between doctor and patient. The author concludes that it is up to the doctors themselves, through the exercise of social responsibility, hard work, and the implementation of the long-needed revision of the educational curriculum to break the vicious circle of permissive society, bureaucratic system, and inadequate care.

1079 **Hill, K.R.** *Some reflections on medical education and teaching in the developing countries.* British Medical Journal (London), 3, 1 Sep 1962, 585-587. Engl.

Revision of the medical curriculum to satisfy today's needs is proposed. The author feels that the doctor's general training course, originally devised to make him proficient in almost all disciplines, is no longer relevant. The complexity of medical knowledge and techniques is such that it is impossible to train a doctor in depth for any one branch of medicine prior to the postgraduate stage. The answer to this predicament is to equip the student with the "intellectual armamentarium" to meet life as he finds it. A suggested course curriculum would include: a preliminary year of general science; a 6-7-year medical course with an integrated core of biology, physiology, biochemistry, and medical physics; and basic study of general surgery and medicine, with some instruction in obstetrics, psychology, preventive medicine, and public health. Such an education would enable the doctor to tackle, in a scientific manner, new, more subtle problems consequent on the rapid development of a technological society. Further suggestions include integrating the medical school with the university hospital, and revising the concept of medical training to accommodate the general practitioner, whose qualification would be completion of a 4-year bachelor degree programme in basic medical science.

1080 **Horwitz, A.** *Formacion de especialistas de salud en las Americas. (Training of health specialists in the Americas).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 64, Feb 1968, 154-156. Span.
Editorial.

It is the moral obligation of governments in Latin America, as elsewhere in the world, and the responsibility of medical educators to see that adequate numbers of health workers graduate from the universities and that they are well prepared for the task of raising the health standards of the people. Each day more people claim improved health as their national right but, despite some progress, poliomyelitis, malaria, and smallpox have still not been eradicated. In view of the new hopes of the Latin American people, new structures will have to replace old, and new technology and methods will have to be brought to bear on the fight against disease to ensure the welfare of the greatest number.

1081 **India, Ministry of Health and Family Planning.** *Medical Education Conference.* New Delhi, Department of Health, Ministry of Health and Family Planning, 1971. 259p. Engl.
Medical Education Conference, New Delhi, 6-7 Jul 1970.
See also entry 1082.

Medical education should be reoriented to produce "basic doctors," emotionally prepared and professionally competent to meet the needs of the rural community. Recognizing the need for reorientation, the Indian government appointed a committee to examine all aspects of medical education, including course content, selection of candidates, fees, etc., in the light of national needs and resources. The conclusions and recommendations of the committee are reported in this publication, including very detailed suggestions on planning the curriculum. A conference of ministers, experts, and college principals endorsed these recommendations and the proposals contained in four working papers; the latter are concerned with the selection of students for medical colleges, medical education and community health, the importance of health promotion in the undergraduate medical syllabus; and the lack of balance between the need to produce basic doctors and the extensive facilities available for postgraduate specialization.

1082 **India, Ministry of Health and Family Planning.** *Implementation of recommendations of the Medical Education Committee 1969 as modified and enlarged by the Medical Education Conference 1970 and accepted by Government of India.* New Delhi, Department of Health, Ministry of Health and Family Planning, 1970. 7p. Engl.
Unpublished document. See also entry 1081.

This document lists the specific recommendations of the Medical Education Committee (1969) and Medical Education Conference (1970) concerning medical undergraduate training in India. Most of the recommendations are concerned with placing greater emphasis on health at the community level: increasing the amount of practical instruction, teaching both curative and preventive aspects of medicine, providing greater incentives for doctors to work in rural areas, and reducing the emphasis on postgraduate specialization. The document was distributed to all relevant institutions (state governments, medical colleges, etc.) for immediate implementation.

1083 **Lambo, T.A.** *Attitudes: students and staff.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 201-224. Engl.

The attitudes of medical students and staff to the new philosophy of community medicine, which represents a departure from the conventional and traditional disciplines taught at medical school, are discussed. Experience gained in two Nigerian projects in community health has demonstrated the need for collaboration with other medical specialities and nonmedical disciplines but, at the same time, has revealed misunderstandings and problems of communication. These are a consequence of the reservations and resistance of staff and students toward community medicine and rural teaching, partly caused by their lack of proper orientation. The staff lacked relevant experience and, therefore, viewed conservatively any innovations in rural health, while the students generally had expectations of careers in "modern" medicine and feared relegation to the "backwoods." The author proposes ways to motivate staff and students and to give them a clearer understanding of the objectives of community medicine. His suggestions include early introduction into the curriculum of the related nonmedical subjects, better explanation of the imaginative and innovative nature of this aspect of medicine, and a critical examination of the conditions of medical service in rural areas, embracing salaries, living conditions, career structure, etc.

1084 Launiala, K. *Finlandska Zaria-projektet: U-hjalp med spridnings effekt. (Finnish Zaria project: a medical aid project with a dispersion effect).* Nordisk Medicin (Stockholm), 88, Mar 1973, 84-85. Swedish.

The Zaria project, a bilateral Finnish medical aid programme in Nigeria, aims at training future physicians, nurses, and medical auxiliaries in practical, preventive, and child care on the principle that teaching medical personnel is one of the most far-reaching ways of giving aid to developing countries. The project is part of the educational programme of Ahmadu Bello, a university noted for its independent curriculum, i.e., a curriculum adjusted to Nigerian needs. It is situated in a teaching hospital in a rural area where medical students spend 5-6 months accumulating practical experience in a team situation. Since maternal and child health (MCH) has been identified as the area in which need for services is greatest, the project's teaching facilities are being expanded to include a permanent MCH consulting station and mobile clinic.

1085 London School of Hygiene and Tropical Medicine, London. *Change in tropical medicine and public health teaching.* Central African Journal of Medicine (Salisbury, Rhodesia), 9(2), Feb 1963, 74-75. Engl.

This brief announcement outlines three specialized courses offered by the London School of Hygiene and Tropical Medicine as of October 1963. They are the University of London Academic Postgraduate Diplomas in tropical public health (DTPH), applied parasitology and entomology (DAP and E), and clinical medicine in the tropics (DCMT). The DTPH is closely related to the public health course but with a stronger basis in parasitology, entomology, and tropical bacteriology, and less emphasis on noncommunicable disease. The DAP and E is intended for the biologist specializing in medical parasitology or entomology and is for graduates in medicine, veterinary medicine, and science. The DCMT is intended as basic training for the medical officer who hopes to qualify eventually for consultant status.

1086 Longo, L.D. *Medicine and medical education in Nigeria.* New England Journal of Medicine (Boston), 268(19), 9 May 1963, 1044-1055. Engl. 63 refs.

The geography, economy, culture, and history of Nigeria are outlined to provide a background to the understanding of its current medical problems. Vital statistics on population distribution, disease patterns, and health conditions are presented in tabular form to illustrate the plight of millions of people deprived of an adequate standard of living, proper diet, and medical care. Principal diseases, traditional and modern medical practice, and existing health facilities are described; the present status and projected future of medical and paramedical education are discussed. The need for increased emphasis on preventive medicine has been recognized, as has the fact that only through education will permanent progress be realized.

1087 Mahidol University, Ramathibodi Faculty of Medicine, Bangkok. *Ramathibodi community health program: a brief summary.* Bangkok, Mahidol University, Ramathibodi Faculty of Medicine, Rama CHP 2/72, 1972. 4p. Engl. Unpublished document.

The interdepartmental community health programme of the Faculty of Medicine, Ramathibodi Hospital (Thailand), aims at providing medical students with the skills and knowledge required to determine the health needs of a community, to design appropriate health care programmes, and to perform effectively as health centre physicians. Training takes place at a rural health centre, and this summary outlines the five courses offered: (1) health and demographic surveillance; (2) analysis of community health problems; (3) community health planning; (4) "clerkship" in community health (general participation in health centre activities); and (5) internship rotation (including administrative aspects of the national health care system, and the roles and responsibilities of physicians and other health workers). The major goal is to motivate students to view health care not just in terms of doctors practicing curative medicine but in terms of community health care: "the provision of comprehensive, integrated health care (curative, preventive, and promotive) to a defined population group by a team of health workers, led by a physician."

1088 Mukherjee, S.K. *General practitioner's point of view on "comprehensive health, essential requirements."* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 122. Engl.

A general practitioner in India asserts that health problems will not be solved by opening numerous hospitals and dispensaries of various grades nor by registering unqualified persons to staff them. Instead, preventive medicine should be given greater emphasis, and the potential role of general practitioners, who in India attend to 80% of the sick, should be explored. Because of their high status in the community, the general practitioners could advise on preventive measures with some authority; but in order to effectively administer programmes they would need guidance from public health specialists, a supply of vaccination materials, comprehensive pamphlets and charts on public health programmes, and cooperation from the government health department. The author also asserts that (1) since health education is being taught mainly to younger children who cannot absorb the information, it should be postponed until they reach pre-high school classes; (2) every hospital should have a preventive medicine department, to advise on nutrition, metabolic and cardiovascular disorders, and prophylactic immunization; and (3) 30-50% of recruits to government medical services should be diverted to preventive medicine.

1089 **Nayar, S.** National Institute of Health Administration and Education, New Delhi. *Problem of health care in rural India.* NIHAE Bulletin (New Delhi), 5(4), 1972, 253-260. Engl.

Often overlooked causes of doctors' reluctance to serve in the rural areas of India are inadequate preparation for the administrative duties, the intellectual isolation, limited supplies, and poor referral services. Furthermore, the training in preventive and social medicine, although fine in theory, has not proved relevant to the needs of a comprehensive health care system. Instead, field practice during training and a reversal of the trend toward dissociation of preventive and curative aspects of medicine are required: there are too many specialists and not enough multipurpose health workers. A postgraduate course in community medicine also might improve the situation. One other suggestion is to decentralize the management of environmental health problems so that rural health personnel can work with individual communities in tackling their own, most pressing, local health problems.

1090 **Neki, J.S.** *Psychiatric education and the social role of the psychiatrist in developing South-East Asian countries.* Social Science and Medicine (Oxford), 7, Feb 1973, 103-107. Engl.

Mental health problems in developing countries differ from those in developed countries in that they most often result from opposition between the forces of tradition and the forces of change. This conflict demands a particular insight on the part of the psychiatrist. To resolve it he must be able to judge which elements of tradition are stable and which are mutable – in other words, to what extent and in what form the culture can accommodate change. This type of problem-solving requires the psychiatrist to assume a new, community-oriented role, one for which his Western training scarcely prepares him. The author reiterates an agreement reached at the 1970 WHO seminar on psychiatric education: it is essential for the psychiatrist to be trained in such a way that the knowledge he acquires can be applied in his own country. Examples given are from India and other South East Asian countries.

1091 **Pan American Federation of Associations of Medical Faculties, Bogota, Colombia.** *Proyecto de la facultad de medicina de la universidad de Panama, Republica de Panama. (Project of the School of Medicine of Panama University, Republic of Panama).* Bogota, Pan American Federation of Associations of Medical Faculties, Aug 1973. 33p. Span.
Unpublished document.

The integrated medicine project in Panama's Colon province is encouraging the development of medical education at the community level, with emphasis on rural and semiurban health care practice. Students will be trained outside the traditional institutional framework of laboratories and hospitals. Experiences in the community laboratory will reinforce the technical competence of the future physician by allowing him to practice his theoretical knowledge of health promotion, health protection, and health recovery systems. Effective 1973, the revised curriculum introduces a new feature: the graduate student will be permitted free practice in his profession only after completion of his internship and 1 year of rural practice. The scheme will cover 900 km^2 in which about 28 000 people live. The hospital at Colon will be the headquarters of other small peripheral hospitals and rural health posts. Rural health care programmes will aim at arresting the most important causes of death and sickness in the region; the community will be encouraged to participate, and auxiliary health workers will be trained. The document lists plans for the period 1973-79, including services to be established and budgets for the affiliated rural health centres.

1092 **Pan American Federation of Associations of Medical Faculties, Bogota, Colombia. Universidad de San Carlos de Guatemala, Guatemala.** *Programa de ensenanza de medicina de la comunidad. (Medical teaching programme in the community).* Guatemala, Universidad de San Carlos de Guatemala, Aug 1973. 33p. Span.
Unpublished document.

Wishing to extend the benefits of modern medicine to rural areas of Guatemala, the Faculty of Medicine of St. Carlos University (Guatemala City) reformed its curriculum in 1971 to include more fieldwork in rural areas. A programme has been undertaken in cooperation with other national and foreign institutions to familiarize the future physician with rural conditions while extending his services to a rural community. These services include the training of auxiliary health workers to take charge of the rural health posts. Future plans are to implement the programme throughout the country and to incorporate students of other scientific disciplines (i.e., dentistry, nutrition, sociology, nursing,

veterinary science, and agronomy), encouraging development in all spheres simultaneously. The document discusses activities planned for a 3-year period, and the human and material resources necessary for their implementation.

1093 **Rao, M.N., Banerjee, K.B.** *Economics of health care in India. Cost of education in public health at postgraduate level.* Indian Journal of Public Health (Calcutta), 15(2), Apr 1971, 69-73. Engl.

Estimating the cost of education is the aim of this study on capital costs of the All India Institute of Hygiene and Public Health (Calcutta). The institute is a well established centre that offers a range of courses in public health. Its "capital training costs," which include monies for buildings, equipment, salaries, depreciation, maintenance, etc., have been calculated, although the variety of courses offered and the difficulty of separating the teaching, research, and field service components have complicated calculations. The results indicate that a postgraduate diploma course in any public health discipline extending over an academic year costs about 20 000-25 000 rupees.

1094 **Rosinski, E.F.** *Education and role of the physician: a redefinition.* Journal of the American Medical Association (Chicago), 222(4), 23 Oct 1972, 473-475. Engl.

Three categories of medical professional are proposed for the USA: medical practitioners, medical clinicians, and medical scientists. The duties of the medical practitioner would correspond with those of the assistant medical officer found in other countries. This professional, after attaining a bachelor's degree, would provide primary medical care. A suitable curriculum is outlined. The medical clinician would correspond to the present medical specialist, and training and education would be similar. The medical clinician would not practice primary care but would treat only referrals from medical practitioners and self-referred patients. The medical scientist, who could have a doctoral degree in a field other than medicine, would pursue a narrow specialization, and his activities would be confined to an academic setting. Finally, the system would allow a medical practitioner to aspire to the other two categories. The author concludes that this new structure would remove the overlap and irrelevance in present educational programmes.

1095 **Rosinski, E.F.** *Community hospital as a center for training and education.* Journal of the American Medical Association (Chicago), 206(9), 25 Nov 1968, 1955-1957. Engl.

Because the health manpower shortage in the USA is so grave, every conceivable resource for training must be utilized. Community hospitals represent a resource with tremendous potential. Working in partnership with community colleges, community hospitals can develop innovative training programmes producing a vast array of health personnel. In addition, medical students can experience patient care approaches not always demonstrated in university centres. Likewise, continuing education programmes geared to practicing physicians should be expanded in community hospitals. In combining educational programmes with patient care and research on the delivery of health care, community hospitals can contribute significantly toward reducing the health manpower shortage. (Revised author abstract.)

1096 **Sich, D.** *Dilemma of the medical profession: a need for change in medical education.* Contact (Geneva), 24, Dec 1974, 1-9. Engl.
Presbyterian Medical Centre, Chonju, Korea, Mar 1974.

The modern physician, states the author, has become a professional cripple who can no longer practice without the support of a hospital. He has the advanced scientific knowledge but does not know how to apply this for the physical, social, and mental well-being of all people, especially when practicing in a developing country. This is because medical training has become entirely institutionalized and unrelated to the community setting. Patients who cannot afford, or who are not motivated, to come to a hospital are left out of the system. On the other hand, the sick individual at home is also left out of public health services, which evolved separately and developed a mass approach to health problems. This separation of mass-oriented public health and hospital-oriented curative medicine is inefficient and expensive and has proved disastrous in developing countries. According to the author, the answer to the problem is community medicine, which strives to bring curative medicine into the community and home and to bring preventive medicine into the hospital. In practice, it is likely that public health workers, who have closer contact with the community than do clinicians, will exert the greatest influence on the planning and implementation of community medicine. In any event, introduction of community medicine into the curriculum will revolutionize medical education.

1097 **Stewart, M.M.** *Medical schools and community health care: a perspective.* Journal of the Medical Association of Thailand (Bangkok), 54(10), Oct 1971, 684-687. Engl.

Each of Thailand's four medical schools has an undergraduate teaching programme in social and preventive medicine. These programmes focus on the health problems of large population groups, usually outside the hospital. Emphasis is placed on health promotion and disease prevention. The behavioural and social sciences are used to analyze community attitudes, organization, and health behaviour. Field surveys, home visits, and field practice in rural and urban health centres and mobile clinics constitute the practical laboratory of the course at present. The momentous question now facing medical schools is to what extent they should involve themselves in health care programmes outside the hospital, and whether this involvement might best be accomplished through an operational programme. Since community medicine developed independently in each of the schools, it is suggested that the establishment of

better communication between them, perhaps through a workshop convened by the Ministry of Public Health, would be a positive move toward a coordinated national effort in the field of community health.

1098 Timmappaya, A. *Managerial role of primary health centre medical officers.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 26-28. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

An adequate job description for the physician in charge of a primary health centre in India has yet to be designed and, as a result, physicians are ill prepared to take on the responsibilities implicit in the role – directing and supervising a large number of subordinate staff, establishing good public relations with the rural community, directing and coordinating programmes for implementation by the health centre, and managing health centre supplies. The author points out that fostering a sense of managerial responsibility in the primary health centre medical officer is as important as educating him in preventive and community medicine.

1099 Ukabam, S.O. *The Ibarapa project.* In McCormick, G., ed., CUSO Readings in Health, Ottawa, Canadian University Service Overseas, n.d., 174-177. Engl.
See also entry 788.

The Ibarapa project, Nigeria, was conceived as a means of providing medical students of the University of Ibadan Medical School with experience in community diagnosis. The process devised for the student progresses through the long-term examination of a selected group, the determination of its health needs, and the devising of effective, yet economically feasible, means to meet those needs. Ibarapa, the district chosen, is an area of 1 000 square miles and is inhabited by a population of 137 542, most of whom are Yoruba and farm for their living. Six groups of 4th-year students now spend 6 weeks each on the project, working in the community health centre, the clinics, the laboratory, and participating in the current research programmes (health statistics, epidemiology, the social aspects of obstetrics and pediatrics, environmental health, etc.). Experience on the project so far has proved both interesting and rewarding to the students.

1100 Webster, D.A. *General purpose doctors.* Saving Health (London), 10(4), Dec 1971, 69-75. Engl.
Medical Missionary Association annual meeting, 23 Jun 1971.

The author enthuses over the medical and evangelical opportunities awaiting missionary doctors in East Africa. Amudat Hospital (Uganda) was built and largely financed by the government but is staffed and administered by the Bible Churchmen's Missionary Service. Its staff of one doctor, two nursing sisters, five dressers, one laboratory assistant, and a health visitor serve about 35 000 people in an area of 7 000 square miles. They are increasing their activities in preventive medicine, with immunization, health education, and under-fives' and antenatal clinics, and this new emphasis is being maintained during their visits into outlying regions. The staff also undertake the training of dressers, both for their own hospital and for the government dispensaries. African governments and medical missions are now working more closely together to provide comprehensive health services, but manpower is still limited. In Kenya, for example, there have been hospitals that are not staffed by a doctor. The presence of one extra doctor in a developed country makes little difference, but one missionary doctor here would have considerable impact.

1101 WHO, Geneva. *Development of education programmes for the health professions.* Geneva, WHO Public Health Papers No.52, 1973. 103p. Engl.

This group of papers applies teaching methods and innovations to education for health professionals; the first three papers concern planning. They examine the role of the educational research and development unit (a group of persons trained to identify educational objectives and the instructional tools best suited to reaching them), the process of programme planning, and the procedure for setting educational objectives. The next articles focus on teaching methods and evaluation and comprise discussions on audiovisual aids, the lecture method, diagnostic examinations, and attitude testing. It is emphasized that such tools must be appropriate not only to curriculum objectives but to the audience. Finally, an outline for organizing short-term programmes for training teachers of health personnel is presented.

1102 WHO, Geneva. *Congo experiment.* WHO Chronicle (Geneva), 24(10), Oct 1970, 453-456. Engl.

The crises of the early 1960s left the Democratic Republic of the Congo (Zaire) with almost no doctors. To fill this gap, WHO organized a "crash" course designed to turn 154 Congolese medical assistants into qualified doctors, within 3 years, by training them in European medical schools. At that time, the country's indigenous medical force consisted of 136 medical assistants and another 100 in training. The 60 medical assistants chosen for the first year's intake were placed, with their families, in several French university towns. Social as well as academic problems had to be faced by the Congolese nationals in adapting to a European way of life. Training emphasized surgery and practical medicine as opposed to research. Pre-training and "fill-in" courses were given to provide the students with the necessary prerequisites and background in science. Intensive vacation courses were given in subjects in which the students did poorly. The first year's intake of students graduated in 1963. Of the 154 students who eventually took the course, 150 qualified as doctors and all returned to the Congo to take up responsible medical positions.

1103 WHO, Geneva. *Training medical students outside the hospital.* WHO Chronicle (Geneva), 18(11), 1964, 423-424. Engl.

Three WHO consultants point out the inadequacy of using only the hospital as the setting for training today's physicians and paramedics. Its limitations are threefold: it is relatively isolated from the community, it provides closely defined and limited services, and its patients are not representative of the community. In the hospital, the student encounters an exaggerated proportion of rare conditions, and he sees disease as a hospital episode and not a community problem. It is suggested, therefore, that some of the student's training be removed to the health centre, the outpatient department, the field practice area, etc., so that he may experience medical practice in its natural setting and become acquainted with his role in community medicine.

1104 Wray, J.D. *Undergraduate and graduate education in community medicine.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 155-184. Engl.

One reason for the failure of governmental health services to meet the demands of community medicine in developing countries is the education of physicians. The author proposes that the objective of this education should be to teach the student how to function competently as the physician-director of a district health centre, the key element in the health care system. This is especially important if the young graduate must immediately serve a compulsory period of duty in a rural area. Changes are therefore required in the medical curriculum, teaching methods, and traditional values of medical educators. The thoroughness in training students for the medical care of the individual should also be applied to the medical care of the community, and the author draws many parallels between the scientific practice of both disciplines. He describes the basic components of community medicine, how these subjects might be incorporated into the curriculum, how community medicine should be taught, and how postgraduates should be given the opportunity of practicing under supervision. There is also a list of points to be considered in the selection and preparation of suitable teaching staff. Some specific aspects of education programmes from around the world are raised in the discussion following the paper.

IV.1.2 Lower- and middle-level health workers

See also: 0707, 0711, 0733, 0738, 0739, 0744, 0745, 0746, 0748, 0753, 0757, 0773, 0779, 0788, 0806, 0812, 0832, 0834, 0844, 0884, 0973, 0991, 0994, 1014, 1034, 1061, 1063, 1074, 1086, 1092, 1202, 1260, 1266, 1270, 1271, 1274, 1275, 1277, 1280, 1281, 1284, 1286, 1293, 1295, 1300, 1311, 1312

1105 Adetoro, J.E. *Nigerian medical auxiliary.* Journal of the National Medical Association (New York), 63(3), May 1971, 192-196. Engl. 8 refs.

The auxiliary health worker is a controversial figure in Nigeria today. The purpose of this paper, therefore, is to restate the government's position and to correct misunderstandings. The first misunderstanding is that the auxiliary, or "health post officer," is a Nigerian innovation. Examples of well-established auxiliary cadres from many countries disprove this. Another is that the auxiliary is new to Nigeria, whereas only the attempt to regularize and standardize his training is. The auxiliary is not to be considered an inferior sort of doctor. He fulfills a different function, operating within clearly defined limits, under physician supervision. He is left to his own devices only in routine or emergency cases. A proposed health post officer training course is outlined.

1106 All Africa Leprosy and Rehabilitation Training Centre, Addis Ababa. *ALERT's facilities for training.* Addis Ababa, All Africa Leprosy and Rehabilitation Training Centre, n.d. 16p. Engl.

ALERT (All Africa Leprosy and Rehabilitation Training Centre, Ethiopia) has developed courses for training various categories of health workers in modern techniques of leprosy control, treatment, and rehabilitation. Specialized and in-service courses are offered. The Armauer Hansen Research Institute, Addis Ababa, is responsible for the immunopathology courses and works closely with ALERT. Accommodation for up to 42 trainees is provided in the student hostel. Field experience is offered through the leprosy control programme in the province of Shoa, Ethiopia, and through contact with the inpatient care programme and the leprosy hospital. Staff is supplemented by short-term consultants in subjects such as personnel management, sociology, and teaching methods. Training courses are designed for physicians, rural area supervisors, rehabilitation staff, leprosy control staff, rehabilitation workers, hospital nurses, and visiting observers. Information on courses offered, training awards, cost and accommodation, means of applying for the programme, and information on training courses outside Ethiopia are given.

1107 Andreoli, K.G., Stead, E.A. *Training physicians' assistants at Duke.* American Journal of Nursing (New York), 67(7), Jul 1967, 1442-1443. Engl.

A system for training physicians' assistants currently under way at Duke University, North Carolina, is based on the philosophy that doctors now perform such complex and specialized work that they require an assistant tailored to their individual needs. A demonstrated aptitude for health work and a willingness to work at the same pace as a doctor are considered more important for admission than a university degree. The programme is organized as follows: 1 year of general biology; 1 year of practical work alongside doctors and nurses in the ward, the clinic, and the laboratory; and 1 year of specialization according to the specifications of

the assistant's future employer. The question of licensing physicians' assistants is discussed briefly. The author feels that institutions, rather than assistants, should be licensed, but that physicians' assistants should be given certificates listing the areas in which they are competent to perform under the supervision of a doctor.

1108 Anten, J.F., van Etten, G.M. Tanzania, Ministry of Health. *Mwanza Programme on Public Health, Ministry of Health, first half-yearly report for 1973.* Mwanza, Tanzania, Ministry of Health, Jul 1973. 6p. Engl.
Unpublished document. See also entries 178(Vol.1) and 1109.

Extension of the Mwanza programme, a public health teaching scheme in Tanzania, for 2 years from 1974 will permit: (1) development of the curriculum for auxiliaries in cooperation with a WHO consultant; (2) assessment of training methods and examination arrangements; (3) the writing of textbooks for auxiliaries; (4) assistance in postgraduate training at the medical faculty (Dar es Salaam); and (5) establishment of a course in health administration. The earlier project has already made some progress including formation of a mobile health team, distribution of an elementary manual for unqualified health workers, improvements in data collection, and implementation of new developments in the training of auxiliaries following a teachers' workshop held in Kibaha.

1109 Anten, J.F., van Etten, G.M. Tanzania, Ministry of Health. *Mwanza Programme on Public Health, Ministry of Health, second half-yearly report for 1972.* Mwanza, Tanzania, Ministry of Health, Mar 1973. 8p. Engl.
Unpublished document. See also entries 178(Vol.1) and 1108.

Since April 1969, a two-man project team has been seconded from Nijmegen University (Netherlands) to the Ministry of Health (Tanzania) to provide assistance in rural public health in the Mwanza region. The present staff (a public health advisor and a medical sociologist) teach public health to medical assistants, rural medical aides, and nurses, and also give advice on public health problems. This report outlines the teaching curriculum. It includes residential practical sessions at a community health centre; it lists some sources of simple teaching aids, summarizes extramural teaching activities, and discusses plans to send staff to Nijmegen for specialist training. Other projects referred to include: a survey of local water supplies; evaluation of mother and child health services; an on-going schistosomiasis research programme; development of leprosy services; and future expansion and coordination of health services in this and surrounding regions.

1110 Aragones, A.R., Villalta, E.M., Meza, R.E. Costa Rica, Ministry of Public Health. *Utilizacion de personal auxiliar para ampliar la cobertura sanitaria en el medio rural. (Use of auxiliary health workers in providing health care services in rural areas).* San Jose, Ministry of Public Health, Jul 1971. 67p. Span. 17 refs.

Some of the steps taken by the Costa Rican government to extend health coverage to her rural areas are outlined. These include a plan to establish rural health posts manned by two auxiliary health workers, one staying at the post and the other making a tour of the district, on a rotation basis of 20–30 days. The functions of the auxiliary will include the implementation of programmes on community development, health education, preventive medicine, and environmental sanitation; gathering statistical data; and administering first aid. His training period will last 3 months or longer, if necessary. Other auxiliary cadres being utilized already include: empirical midwives who have been receiving additional training since 1966; teachers who have been authorized by law to administer pertinent treatment in cases of malaria and parasitic diseases; and nonprofessionals who have been authorized by the College of Pharmacy to staff a drug-dispensing network throughout the country.

1111 Aviel, E., Ben-Sira, I., Ticho, U., David, R. *Regional organization of ophthalmic services in Malawi.* Israel Journal of Medical Science (Jerusalem), 8(8-9), Aug-Sep 1972, 1260-1265. Engl.

There is an acute shortage of physicians in Malawi and as a result none can be spared to devote their time to specialization in a particular field such as ophthalmology. In fact, until 1969 ophthalmic services were available only at the Queen Elizabeth Central Hospital eye department in Blantyre. Consequently, a comprehensive 1-year training course has been created to produce ophthalmic medical assistants. Trainees are young medical assistants who have completed 4 years training in elementary medicine and surgery at government or mission hospitals. Most ophthalmic medical assistants are posted to eye units in outlying hospitals, and one is assigned to a mobile eye unit operated by the Royal Commonwealth Society for the Blind. Because of the workload, the assistants usually spend half their time in ophthalmological work and half in routine medical and surgical duties. Every 3 months they are visited by the supervising ophthalmologist who attends to any administrative problems, discusses selected cases, and replenishes drug supplies. The assistants can diagnose and treat most problems, though they do refer some to Blantyre; they also provide health education and preventive measures to help deter the rural population from resorting to the medications of traditional healers, who enjoy high status in the tribal community.

1112 Bagiastra, I.M. *Training of paramedical personnel in Indonesia.* Honolulu, East-West Center, 1965. 101p. Engl.

The book begins with a brief history of the socioeconomic development of Indonesia, then goes on to discuss the duties of the Training Division of the Ministry of Health, the types of schools that existed up until the end of 1963, and the training of paramedical personnel in some other Asian countries (Thailand, Philippines,

Taiwan, and India). Plans for future paramedical training in Indonesia are finally considered in the light of specified assumptions, and the author claims that the factors that led to the failure to train the target number of paramedicals were: (1) an inadequate budget for training personnel; (2) insufficient understanding and interest on the part of the regional heads and directors of the local health services; and (3) insufficient numbers of training personnel.

1113 **Bedaya-Ngaro, S.** *Central African Republic: preparing the future.* World Health (Geneva), Jun 1972, 26-27. Engl.

The Central African Republic plans to open a school for medical assistants as part of its 1971-75 Five Year Plan. It is hoped that this will reduce the number of cases now being referred to urban hospitals and allow them to be treated locally. The medical assistant will be expected to lead a preventive-curative team of local level workers. A 4-year training programme is proposed, with heavy emphasis on in-service training and later field experience. It is not intended that the candidate eventually become a physician, but he may expect to retire at a level of income and benefits equivalent to that of a doctor at mid-career. The school of medical assistants is to be associated with the Institute of Medico-Social Education and Public Health.

1114 **Beri, K.K.** Papua New Guinea, Department of Public Health. *Training dispensers.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 623-624. Engl.
See also entry 823.

This short report lists the terms of reference and recommendations of a committee established to examine the role of dispensers in Papua New Guinea. The dispenser prepares the medications prescribed by a health professional and should have a career structure similar to that of a medical technologist. Training should comprise 2 years full-time instruction and a 1-year "apprenticeship." The first intake in the recommended programme would be 15-20 trainees, although an estimated 63 dispensers are required immediately to staff medical stores and hospitals. The dispenser would release nurses and other staff from duties for which they are not trained and he would make fewer errors in filling prescriptions. Finally, he would approach ordering and distribution more rationally and thus save money. It is anticipated that this new health worker will be in demand after his worth is realized and that within the next 10 years at least 120 dispensers will be required.

1115 **Beri, K.K.** Papua New Guinea, Department of Public Health. *Overview of paramedical training.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 625-626. Engl.
See also entry 823.

For at least the next 30 years, Papua New Guinea expects to depend largely on allied health personnel to manage its health services. The doctor is likely to be the second or third line of contact, an aid post orderly or health extension officer being the primary one. Hence the training programmes and curricula for allied health personnel are emphasizing the type of skills actually required for practicing in the field. Although a health worker cannot be trained to cope with every situation encountered, attempts are being made to provide each trainee with a basic level of knowledge and to supplement this with training suited to the location in which he is to work. It is hoped that the structure, organization, and staffing of health centres will be standardized. Trainees residing in these centres can then participate in all of the activities and feel that they are part of the health team. Postbasic and postgraduate programmes are also being introduced to provide more supervisors, managers, and specialists and thus speed up the process of localization in the hospital and community health services.

1116 **Bhagat, M.H.** *In-service health education training of block medical officers: a strategy.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 60-63. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

The block medical officer is the key person in the Indian rural health organization; he is the team leader and the liaison between the services and the community. It is his responsibility to recognize operational problems and find solutions to them. A proposed curriculum for a 30-day course to meet the training needs of block medical officers is outlined. Course content is divided into sections on public health, environmental sanitation, control of communicable diseases, maternal and child health and family planning, vital statistics, and health education. The teaching approach will generally be a lecture followed by a case study, with field assignments given to groups. The course will then be evaluated in terms of achievement of objectives, course strategy, and methodology.

1117 **Bhattacharjee, B.N.** *Training guide for trainers of the Training Institute of Basic Health Workers (duration 15 days).* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 10-18. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

A training programme has been designed to enable India's basic health worker instructors to give job-oriented field training to their students and to foster in them the knowledge and skills required in vigilance work, i.e., communicable disease recognition. Four

2-week courses will be offered per year; the 20 trainees admitted per course are to be provided with a stipend of 15 rupees per day. Details of the curriculum, including teaching methodology, are included.

1118 Biddulph, J. *Medical assistants.* Papua and New Guinea Medical Journal (Konedobu), 12(1), Mar 1969, 23-25. Engl.

In Papua New Guinea, medical assistants have been playing a major role in health care delivery for several years and are providing health services for the rural majority at a price the country can afford. Because most patients have minor illnesses, which can be readily diagnosed and will respond to standardized treatment, the medical assistant can easily manage them. He can also perform health promotive work as competently as can the doctor who should be restricted to referral, advisory, planning, educational, and supervisory services. The doctor and medical assistant thus complement each other. It must be emphasized, however, that the duties, status, and career path of the auxiliary must be well defined to provide incentive and job satisfaction.

1119 Callan, L.B. *Supervision, the key to success with aides.* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 780-787. Engl.

In this general discussion of health aide supervision, essential concepts, techniques of applying them, and their results are outlined. The author proceeds from the assumption that few people have been trained or have experience in supervising aides, and he defines supervision as "a strategy for accomplishing work effectively through joint efforts." This strategy should take into account the human needs of survival, safety or security, love and belonging, prestige and self-esteem, and, finally, self-fulfillment. Aide supervisors should be aware that the health personnel hierarchy often encourages a sense of isolation; therefore they should invite aides to participate in decision-making. Supervisors should also be prepared for conflicts between workers that are likely to arise because of misunderstandings about life-styles, roles, and duties. After the initial orientation period, the health aide should require progressively less supervision – weekly meetings, then quarterly planning and evaluation sessions, and, finally, long-range reviews. The speed of this progression will vary, but its effectiveness will be easily measured in outcome, employee satisfaction, working habits, absenteeism, and loyalty to the programme. To assist supervisors in evaluating their own performance, a comprehensive list of questions about their practices has been included.

1120 Calu, J., Diop-Mar, I. Ligue des Societes de la Croix-Rouge, Geneva. *Secourisme en Afrique. (First aid in Africa).* Paris, Flammarion Medecine-Sciences, 1973. 54p. Fren.

This illustrated manual outlines the causes and symptoms of certain medical emergencies and steps to follow in dealing with them; the emergencies include state of shock, haemorrhage, asphyxiation, fractures (of many kinds), wounds, burns, fevers, filariasis, dysentery, poisoning, malnutrition, sunstroke, sleeping sickness, leprosy, meningitis, measles, and childbirth. Detailed instructions are given for applying a tourniquet, giving artificial respiration, setting bones, bandaging wounds, transporting the sick, etc., and illustrations show disease transmission via unsanitary conditions, vectors, and parasites. The book is particularly geared toward African readership.

1121 Carlaw, R.W. *Development of interaction as an approach to training.* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 754-759. Engl.

Techniques used for training health workers in British and Australian dependencies in the South Pacific emphasize interaction between trainee, community, trainer, and institution – the "triangle of relationships," whose midpoint is the trainer. The philosophy behind the techniques stresses that what is taught must relate to the trainee's past experience, as information outside that experience is likely to be forgotten. The three phases of training include preparation for a course, the actual training process, and posttraining feedback. The preparation phase comprises seven segments; they range from a statement of problems and objectives, through space, time, and money allocation, to detailed arrangements for field experience. Actual training should revolve around the trainee's perceptions: the interests he has, challenges and problems he finds relevant, and rewards he seeks. Following training, feedback mechanisms must be set up so that training deficiencies can be remedied. Once the trainee has completed his formal course, his job supervisor will function as his new teacher. Keeping this in mind, governments and industries should choose their supervisors wisely from persons who can interact well with others.

1122 Christian Medical Commission, World Council of Churches, Geneva. *Training programmes for health workers.* In Christian Medical Commission, Annual Meeting 1970, Geneva, Christian Medical Commission, 1970, 65-70. Engl.

See entry 840 for complete proceedings.

In this paper it is suggested that church-related training centres alter their programmes to produce different categories of health worker more suited to the needs of developing countries. The training and function of the proposed health liaison worker are described. This person would act as a liaison between the community and the health team (doctors, nurses, etc.). His training would be geared to the particular needs of the community in which he is to work, so that he could help make the community aware of those needs that are as yet unfelt (e.g., the need for environmental sanitation and pure drinking water). Other village personnel (i.e., teachers, pastors, etc.) could be trained to fulfill a similar function. In this way, training institutes would be making limited resources go farther by bringing health care to greater numbers of people at no extra cost.

1123 **Colombia, Ministry of Public Health.** *Programa de adiestramiento de promotoras rurales de salud. (Training programme for rural health promoters).* Bogota, Ministry of Public Health, n.d. 14p. Span.

The programme for rural health promoters in Colombia is divided into seven parts: (1) the rural health promoter and health services; (2) the community; (3) environmental sanitation; (4) maternal and infant care; (5) first aid; (6) tuberculosis programme; and (7) administrative activities. Each part is comprehensively developed: a statement of the overall objectives helps the rural health promoter learn what is expected of her, and each major activity is studied in detail with the aid of lectures, films, and visual aid systems. Depending on the nature of the theme under discussion, some of the lectures or presentations are made by a physician, nurse, or qualified assistant. The hours devoted to theoretical training are complemented by twice their amount in practical sessions. At the conclusion of each part, the degree of competence achieved by each attendant is evaluated.

1124 **Colombia, Ministry of Public Health.** *Instructivo de la entrevista para seleccion de promotoras. (Evaluation system for the selection of rural health promoters).* Bogota, Ministry of Public Health, n.d. 10p. Span.
Unpublished document.

The Colombian Ministry of Public Health has devised a questionnaire, incorporating a point scoring system, to enable interviewers of potential rural health promoters to better assess the suitability of candidates. Questions have been devised to obtain personal information such as age, education, marital status, means of support, state of health, job expectations and previous experience in community work. Other questions are concerned with specific aptitudes including motivation, initiative, facility in establishing interpersonal relationships, overall comprehension of questions, and verbal fluency. The candidate's knowledge of his/her own neighbourhood is also taken into consideration.

1125 **Colombia, Ministry of Public Health.** *Informe diario y mensual de actividades de la promotora rural de salud. (Daily and monthly report of the activities of the rural health promoter).* Bogota, Ministry of Public Health, Medical Attention Division, Maternal and Child Programme, n.d. 2p. Span.
Unpublished document.

Each day, the "rural health promoter" in Colombia must complete this 2-page record chart. It is concerned with five groups of activities: (1) maternal and infant health (including prenatal visits, referrals to the local health centre, referrals for family planning counseling, etc.); (2) other health activities (injections, blood sampling, first aid, etc.); (3) environmental sanitation (noting the numbers of latrines installed, families who have improved their dwellings, families who have separated animals from their living accommodation); (4) education (numbers of talks and meetings with community groups); and (5) vaccinations (numbers, types, and age-groups). In addition, the programme supervisor must complete two tables summarizing the activities of promoters in the different villages, and the number and type of cases referred to the health centre.

1126 **Colombia, Ministry of Public Health.** *Planeacion de cursos para formacion de promotoras rurales de salud: normas. (Planning of courses for the training of rural health promoters: norms).* Bogota, Ministry of Public Health, Medical Attention Division, Maternal and Child Programme, n.d. 11p. Span.
Unpublished document.

Presented in a clear, methodical format, this guide lists the points to be considered when planning a training course for rural health promoters in Colombia. The notes comprise eight sections: (1) selecting a location (availability of permanent medical services, supervisory staff, etc.); (2) selecting individual villages to be served (population size, communications, community organizations); (3) cooperating with local health authorities – e.g., providing information on programme objectives, involving the authorities in selection of candidates; (4) personal qualifications of candidates (age, education, health, disposition, financial state, etc.); (5) the selection process (interviews, examinations, involvement of the community, etc.); (6) teaching and administrative aspects (including classroom facilities, staff, teaching aids); (7) an outline of the course structure; and (8) a summary of the documentation required by the central authority.

1127 **Colombia, Ministry of Public Health.** *Examen de conocimientos para la seleccion de las promotoras. (General knowledge test for the selection of promoters in maternal and child care).* Bogota, Ministry of Public Health, Medical Attention Division, Maternal and Child Programme, n.d. 9p. Span.
Unpublished document.

This test paper, to be completed by candidates for the position of rural health promoter (maternal and infant care programme), comprises a page of general instructions followed by questions in four groups: arithmetic, natural sciences, history/geography, and Spanish. There are 10 questions per group, and in each case, the candidate must select the correct answer from a list of five alternatives. Answers are provided on a separate sheet for the examiner.

1128 **Colombia, Ministry of Public Health.** *Proyecto para la formacion de 7 000 promotoras rurales de salud en Colombia. (Training project for 7 000 rural health promoters in Colombia).* Bogota, Ministry of Public Health, Medical Attention Division, Maternal and Child Programme, n.d. 17p. Span.
Unpublished document.

The need for improved health services in Colombia is clearly illustrated by data on the distribution of population, professional health personnel, and the extent of

morbidity between rural and urban areas. The most practical and economical way of extending health services into the rural areas is to make greater use of the rural health promoter. This report outlines a programme to train 7 000 promoters and includes the qualifications, selection, and training of candidates, and their major duties. Aspects of national planning are also discussed, including the number of communities to be served, the projected number of training courses to be held, and the requirements (personnel, teaching institutions, and finance).

1129 D'Onofrio, C.N. USA, Department of Health, Education, and Welfare. *Aides: pain or panacea?* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 788-801. Engl.

The author notes that while many health agencies regard auxiliary health workers as a cure-all for insufficient manpower, underutilization of resources, inadequate communication, etc., others warn that aides are overrated. Some of the confusion and controversy stems from failure to recognize the differing roles for aides (routine duties, specialized group of functions, or advising on policy), and failure to understand and accept the implications each suggests. Negative experiences, theoretical objections, and resistance to change also contribute. The author reviews these different aspects of the role and utilization of health aides and concludes that when agencies are adequately prepared for introduction, the greatest potential contribution of health aides lies in stimulating a process of education that enables the agency to serve the community better, to help the aides and other staff members to grow in ability and understanding, and to assist the community to achieve physical, mental, and social well-being.

1130 Dempsey, J.J. *Treatment by laymen where no doctors exist.* Journal of the American Medical Association (Chicago), 224(12), 18 Jun 1973, 1647. Engl.

In this letter to the editor, the author gives his views on whether or not intelligent laymen should be given medicines to treat patients in areas where physicians are scarce. His answer is an "almost unqualified 'yes'." He points out that most of the diseases encountered in Asia, Africa, the Middle East and Oceania – malaria, typhoid fever, meningitis, helminthic diseases, trachoma, tuberculosis, etc. – are amenable to drugs that could well be administered by persons with some basic training, a few fundamental diagnostic techniques, and a good supply of modern medicines. However, such a person should also be supplied with a microscope and know how to identify the disease-causing agents that abound in his part of the world.

1131 Drayton, H. *New types of health personnel for rural areas: some experiences in the Caribbean and Venezuela.* In Utilizing New Personnel for Extending Health Care Services, Washington, D.C., Pan American Health Organization, 1973, 1-36. Engl. 38 refs.

Despite increases in the numbers of medical schools and the evolution of more relevant curricula, health services in rural areas are still highly inadequate; therefore, emphasis is now being placed on the training and utilization of auxiliary health personnel. Several countries have introduced this new category of health worker whose specific duties are determined by the country's needs; but problems of acceptance by the community as well as by other members of the health team have delayed widespread introduction in the majority of countries. It is estimated that in Latin America and the Caribbean 37% of the people receive no health care; most of these live in rural areas or in marginal districts of major cities and account for a disproportionately large share of morbidity and mortality. The author describes, with statistical data, the extent of the major health problems confronting this region; the social and economic conditions influencing the rural population; and the shortage, maldistribution, and poor utilization of physicians, nurses, and dentists. Two possible solutions are to integrate folk medicine with modern practices by training traditional healers and to rely more on auxiliaries assisted by graduate nurses. Some experiences with the education, training, and utilization of auxiliary health workers are described with specific reference to Guyana, Jamaica, Venezuela, Guatemala, Cuba, and Costa Rica.

1132 Elliott, K. *Meeting world health needs: the doctor and the medical auxiliary.* World Hospitals (Oxford), Jul 1973, 94-97. Engl. 16 refs.

Two obstacles in the way of world health care are lack of physicians and lack of funds. Poor distribution of existing services aggravates the situation. Whereas 80% of the people in developing countries live in rural areas, 80% of the doctors are located in urban centres. The cost of training physicians in sufficient numbers to remedy the situation would be unrealistic. The solution seems to lie in a "labour intensive" approach to health care – that of the health team. The team would be headed by a doctor and made up of a group of trained auxiliaries, whose education is geared toward the practical rather than the theoretical. The auxiliaries could be trained in a short time to perform routine medical functions. In Malawi, where such a system has already been established, the health services are run by fewer than 100 physicians and about 600 medical care auxiliaries. Professional support and encouragement are essential to the success of such a programme. It is recommended that top-level administrators abandon remaining prejudices and take the lead in providing their people with auxiliary health workers.

1133 Elliott, K. *Using medical auxiliaries: some ideas and examples.* Contact (Geneva), 11, Oct 1972, 1-25. Engl., Fren.

The medical auxiliary is a substitute or an alternative to a physician, to be used under certain circumstances. He is not a substandard doctor. His training is short and practical and usually geared toward local health needs – he need only know enough anatomy, physiology, and pathology to understand the pattern of management of

a disease. The medical auxiliary constitutes a labour-intensive approach to health care that now makes as much sense in developed countries, e.g. the USA, as it does in developing countries. Auxiliary training programmes in the USA, U.K., USSR, Fiji, Ethiopia, Uganda, Sudan, Tanzania, Kenya, Malawi, Nigeria, and the People's Republic of China are briefly described.

1134 **Eneboe, P.** *Village medical aides: Alaska's unsung, unlicensed and unprotected physicians.* Alaska Medicine (Anchorage), 11, Dec 1969, 124-127. Engl.

The plight of Alaska's village medical aides is outlined. These aides, who receive a monthly stipend of $200, are responsible local people briefly trained by a public health nurse or physician to provide scattered and isolated villages with medical care. In theory, the medical aide reports problems and receives physician's instructions via short wave radio; if a problem is judged serious enough, arrangements are made to pick up the patient. In actuality, however, the medical aide's responsibility goes much further. Radio messages are often obscured by static for up to 2 weeks at a time, weather conditions often prevent charter plane pick-ups, and medical aides are sometimes held responsible for deaths that occur due to circumstances beyond their control. An urgent plea is made to the Public Health Service to provide these people with consistent training, recognition, control, and legal protection in the form of licensure and legal definition of limits and responsibilities.

1135 **Fendall, N.R.** *Auxiliary teacher training seminar workshop.* Liverpool, England, Liverpool School of Tropical Medicine, 1973. 1v.(various pagings). Engl.
Unpublished document.
Auxiliary Teacher Training Seminar Workshop, Nigeria, 17-27 Jul 1973.

The purpose of this seminar was to bring together teachers of auxiliary health personnel and let them discover, through discussion, reasons for, and methods of, appropriate training. Anglophone West Africa was chosen for the first seminar because of the traditionally hostile attitude of its professionals toward the "subprofessional" cadres. Nigeria, Ghana, Sierra Leone, and Gambia were represented by principals or tutors from paramedical or auxiliary schools. Several consultants from other countries were also in attendance. Once the two main obstacles had been overcome, i.e., the feeling that all decision-making rested with governments and a tendency of participants to adhere to professional cliques, much constructive discussion, plus a more positive attitude toward auxiliaries, resulted. A copy of the programme agenda is included.

1136 **Fendall, N.R.** *Forerunners.* World Health (Geneva), Jun 1972, 4-7. Engl. Refs.

The modern medical assistant has evolved throughout the world to meet emergency health problems. In Europe, the original medical assistant was the barber-surgeon, a military man who tended the wounded in battle. Feldsher, the Russian cadre, corresponding to medical assistant, comes from the German meaning field barber. Since the time of Peter the Great, retired feldshers have taken up medical practice in the countryside. After the revolution, the Soviet government attempted to upgrade them to physicians by additional training, but the feldsher still plays an important role in Soviet medicine. In Jamaica slaves were treated by colonial health services until emancipation. When discontinuance of the service brought about a rise in child mortality, legislation was passed to establish formal training for "dispensers" to deliver rural health care. India, Fiji, and Africa likewise have a historical precedent for the medical assistant. Latin America and the USA are beginning to develop programmes for the training of medical assistants, as the urgent need to provide health care to rural populations is felt in both developed and developing countries.

1137 **Fendall, N.R.** *Auxiliaries in health care: programs in developing countries.* Baltimore, Md., Johns Hopkins Press, 1972. 200p. Engl., Fren.
Individual chapters abstracted under entries 737, 738, 774, 1138, 1139, 1140, 1141, 1142, 1242, 1252, 1258, and 1262.

With proper health planning, organization, and management, auxiliary personnel can be utilized successfully to contribute to the quantitative and qualitative delivery of medical care. This book provides information on the need for auxiliary personnel, their potential availability, the possibilities for training them, and their successful utilization. It is intended for use by health planners and administrators, qualified practitioners, and teachers and supervisors of auxiliaries. The first chapters discuss the classification of auxiliaries according to education and duties; the activities of "subprofessional schools of medicine" located around the world; epidemiological data from developing areas; and the present distribution of health manpower and future requirements. Each subsequent chapter deals with a specific classification of auxiliary to illustrate utilization within the framework of the major field of interest and activity; discussed are the general medical assistant and specialists in maternal and child care, family planning, environmental health, medical technology, pharmacy, and dental care. The concluding chapter is concerned with the general principles of selection, training, and utilization of auxiliaries.

1138 **Fendall, N.R.** *Subprofessional schools of medicine.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 21-30. Engl., Fren.
See also entry 1137.

This chapter of *Auxiliaries in Health Care* traces the development of subprofessional medical training institutions in developing countries. The common features are emphasized, especially attempts to provide an

abridged version of the university medical college curriculum and to ensure that students acquire the necessary manual skills for a limited number of maneuvers (particularly emergency medical care and minor surgical procedures). These schools, however, tend to raise their standards in the search for international recognition; courses become longer and more expensive and lose sight of the original goals and local requirements. Furthermore, training that results in a subprofessional who is neither a true medical assistant nor a physician has introduced problems of status, lack of recognition, and discontent. Auxiliary schools are intended to develop practical training programmes and provide sufficient personnel to staff basic national health services; medical schools are intended to provide qualitative input and leadership. But subprofessional schools provide for neither the one nor the other.

1139 **Fendall, N.R.** *Medical care and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 31-47. Engl., Fren.
See also entry 1137.

The system of health care delivery to rural populations in developing countries faces problems caused by widespread disease and a grossly disproportionate share of the world's physicians. Where communications are poor or nonexistent, where the economy is largely a nonmonetary one, and where 90-95% of the illness is amenable to simple diagnosis and treatment, utilization of "medical assistants" could substantially reduce the manpower shortage. Supported by a team of auxiliary health personnel, the medical assistant could manage a rural health centre or cottage hospital with minimal supervision. Other measures to ease the situation include extending the activities of the midwife to include child care and giving supplementary training to pharmacists and traditional practitioners. Introducing subprofessionals, however, is undesirable, and retraining specific categories of paramedical workers could prove detrimental to the work for which they were trained. Several tables of data on the quantitative and qualitative aspects of medical care in developing countries are also provided.

1140 **Fendall, N.R.** *Medical assistant.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 48-62. Engl., Fren.
See also entry 1137.

The purpose of introducing medical assistants into the health services of a country is to overcome the shortage and maldistribution of physicians. Training of the assistant should be geared to one of the three settings in which he will be utilized: hospital ward, hospital outpatient or emergency department, and health centre. The different functions in these settings are outlined, and a training programme that could lead to a medical assistant certificate is suggested. The author notes that an applicant's previous education should be sufficient to enable him to grasp elementary principles of diagnosis, treatment, and prevention of common illnesses (a recommended 7-10 years). He advocates alternating theory with practice in the training period and recommends use of oral examinations or on-site performance assessments. Suggested methods of teaching and a sample curriculum are set forth. Refresher courses that would lead to "specialization" in fields such as ophthalmology or health centre administration are recommended. Appended are syllabi for medical assistants in Uganda and Papua New Guinea.

1141 **Fendall, N.R.** *Pharmacy and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 142-157. Engl., Fren.
See also entry 1137.

Two factors indicate that the creation of an auxiliary cadre of pharmacist in developing countries is warranted. First is the availability of precompounded, prepackaged medicines, which have reduced the role of the pharmacist to that of "storekeeper"; the second is the shortage of pharmacists in rural areas. Small medical and health units stocked with well-planned but limited pharmaceutical supplies could easily be managed by an auxiliary who would be responsible for patient counseling, clerical administration, and routine minor medical and laboratory procedures. Some attempts in this direction have been made. In Thailand, for instance, some 300 pharmaceutical preparations were distributed to village headmen for dispensing; Jamaica replaced its professional with a "near-professional" cadre of pharmacist, whose training was practical and adjusted to local rather than international requirements; and Guatemala, Senegal, and Thailand have maintained degree-granting courses for pharmacists while training auxiliary pharmacist or nurse-pharmacist cadres. Further examples are taken from Kenya, Nigeria, the U.K., and the USA. The syllabus for the course of pharmaceutical assistants' training in Kenya is appended.

1142 **Fendall, N.R.** *Selection, training, and utilization of the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 174-197. Engl., Fren.
See also entry 1137.

The auxiliary health worker is either an assistant to or a substitute for the professional. Both these roles require reliability, diligence, trustworthiness, and a vocational attitude. In student selection, therefore, personal qualities should supersede academic ability as should ethnic and tribal origins, and the needs and isolation of a potential student's community. These elements should also influence training and the estimated schedule of progress. Methods for imparting the required theory, vocational skills, and practical training are discussed. Length of training, which includes a probationary period, varies from 2 to 3 years. Content will vary with role and functions of the auxiliary, but a broad base of learning is essential for an understanding of "health," teamwork, and administrative structure. The assistant role is the aim of initial training whereas advanced

training should aim to develop competence in the substitute role. The ultimate success of the auxiliary will depend on his supervisor (professional) who must show an interest in the auxiliary's functions and accord him the status he requires. Statistical data are presented on student enrollments in Africa and Thailand and on comparative costs of training.

1143 **Fendall, N.R.** *Training and use of auxiliary personnel.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 185-200. Engl.

Students should be selected for training as auxiliaries after serving a preliminary apprenticeship in a district hospital or health centre, the selection criteria being: interest and attitudes; reliability, rather than academic potential; and identification with the community. In a national programme, geographic and linguistic balance must be maintained, even at the expense of quality. The emphasis throughout training should be placed on demonstration and repetitive practice rather than theory, as the immediate aims are to develop disciplined minds and trained hands, a defined limit of competency, and selected skills. The student should also have a clear picture of his role in the health service and be aware of the possibilities for his future development. Examples of training programmes for different types of health auxiliary are cited: training to a single skill in Cameroon; the "lady family planning visitor" in Pakistan; and the medical assistant in Papua New Guinea. Further specific experiences from around the world in the training, role, and functions of auxiliaries are included in the discussion section.

1144 **Flahault, D.** *Case for medical assistants.* World Health (Geneva), Jun 1972, 8-15. Engl.

Medical assistants are trained to meet physician shortages rather than to replace physicians, and their training must necessarily be adapted to the needs and traditions of the local community. The auxiliary may need sufficient training to lead a team of workers covering large remote areas or to undertake technologies that have simplified some aspects of medicine and laboratory processing, freeing the physician. Career steps for the medical assistant are outlined, with emphasis on discouraging medical assistants from becoming medical doctors, while optimizing their career opportunities within the rural health system.

1145 **Guatemala, Ministry of Public Health and Social Welfare.** *Objectivos educacionales aceptados. (Accepted educational objectives).* Guatemala, Ministry of Public Health and Social Welfare, n.d. 1v.(various pagings). Span. Unpublished document.

This report outlines the educational objectives of individuals responsible for planning and carrying out social, economic, technological, and administrative programmes in the establishment of viable rural communities in Guatemala. These objectives are to be applied to basic, general, and specific functions. A detailed training programme for all members of the team responsible for the development of a rural community is outlined. Midwifery figures prominently among the tasks to be performed by the group of professionals. This role, which in larger communities might be performed by a physician, in smaller communities would be assigned to the midwife. The role of the auxiliary health worker is emphasized and his training programme is comprehensively detailed. Twenty-two tables analyze the socioeconomic aspects of health care in Guatemala.

1146 **Heath, A.M., Pelz, D.R.** USA, Department of Health, Education, and Welfare. *Perception of functions of health aides by aides themselves and by others.* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 767-772. Engl. 11 refs.

Various roles for the community health aide, as found in the United States, are discussed. These roles may involve the performance of routine tasks, active service as a member of the health team, or assistance in shaping the agency's course of action. In many communities, health aides, having been recruited from the ethnic or socioeconomic groups they are to serve, have helped improve communications between organizations and their clients. One Spanish-American aide described her role as that of a "traffic light" on a "two-way street," promoting a smooth flow of information between her people and the professionals and vice versa. In working closely with the health educator, administrator, doctor, nurse, or social worker, the aide functions as an interpreter – sometimes of language, always of cultural concepts. The author suggests that indigenous aides could assume a similar understanding and interpretive role in dealing with prenatal patients, teenagers, the elderly, migrant farmworkers, alcoholics, and hospitalized or ambulatory patients.

1147 **Hildebrand, G.I.** *Guidelines for effective use of nonprofessionals.* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 773-779. Engl. 8 refs.

Some reflections on the employment of indigenous nonprofessionals (aides) in health education programmes of official or voluntary health agencies in the United States are presented. Topics discussed are: the value of aides in increasing agency efficiency; the establishment of a sound administrative climate to facilitate their smooth incorporation into the agency; training needs of those supervising them; intraagency communication; training, personnel policies, and role definition of aides; salary scales; and hours to be worked. The fact that the aide may be from a disadvantaged socioeconomic background, and that this might be her/his first job, is taken into consideration.

1148 **Hoff, W.** *Importance of training for effective performance.* Public Health Reports (Washington, D.C.), 85(9), Sep 1970, 760-766. Engl. 11 refs.

This paper stresses the importance of the suitability of training that auxiliary health workers receive especially in the United States where this cadre is still relatively new. Although the specific duties and tasks of auxiliaries vary, their work will certainly involve communicating with consumers, identifying health problems, providing personal health care, promoting good health behaviour, general administrative duties, and basic educational functions. These areas should be included in their training programme. The technology of the training itself involves: development of behavioural objectives; identification of specific desirable knowledge, skills, and attitudes; determination of teaching methods; selection of educational materials; and implementation of the training programme. Some consideration is given to the need to provide special preparation for supervisors of auxiliaries, and to find suitable personnel for this task. The importance of evaluating the training programme is pointed out. Elements and concepts discussed are schematically represented, and a selected annotated bibliography of source material is included.

1149 Hoff, W. *Training the disadvantaged as home health aides.* Public Health Reports (Washington, D.C.), 84(7), Jul 1969, 617-623. Engl.

A health aide pilot training project to test how middle-aged (45-62 years) unemployed men and women in poverty areas could be effectively recruited and trained to provide home nursing care was undertaken by the Alameda County Health Department, Oakland, California. Persons recruited were from the most disadvantaged sections of the community, having the lowest education and income, and the fewest jobs; 80% belonged to a minority ethnic group. The 11-week training programme was geared to their educational level as predetermined through testing; the subject matter was organized into discrete units that could be arranged in a progressive sequence, easily assimilated by the trainees; and the trainees were allowed to progress at their own speed. Ninety percent of those enrolled in the programme completed it successfully. After 15 weeks of employment, 24 of the graduates were rated on job performance; they were all performing at satisfactory or above satisfactory levels. It was concluded that, despite little education, great poverty, and histories of failure, frustration, and hopelessness, adults from ghettos and other poverty areas can be trained in a relatively short time to become effective health workers.

1150 Hughbanks, J., Freeborn, D. *Review of 22 training programs for physician's assistant, 1969.* HSMHA Health Reports (Washington, D.C.), 86(10), Oct 1971, 857-862. Engl. 13 refs.

Various programmes in the United States for the training of physician assistants are examined according to curriculum, duties of the graduate, admission requirements, and other characteristics. Programmes reviewed fall into either the specialist or the generalist category. The latter include studies of the basic sciences, basic laboratory procedures, and medical instrumentation, and most include clinical experience. The data obtained are set forth in seven tables. The discussion points out the need for better role definition of the physician assistant, consideration of his legal status and career opportunities, and standardization of training and the establishment of criteria by which to judge it.

1151 India, Ministry of Health and Family Planning. *Guide for training of basic health workers in health education.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, 20 Jan 1971. 19p. Engl.

This guide was designed to standardize course content and teaching methodology for the basic health worker in India, who, once trained, will be responsible for bringing comprehensive health services from the health centre to 10 000-12 000 people. This short-term programme endeavours to strengthen his understanding of communicable disease control, family planning, and vital statistics registration; to detail his function with regard to each; and to develop his skills in diagnosing community health problems and in encouraging community participation in their solution.

1152 India, Ministry of Health and Family Planning. *Training in health education: a guide.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, 1969. 117p. Engl.

This comprehensive guide details an intensive 60-day training course in health education for all workers in the health field. Training is organized on a small group basis (six-eight trainees), with the emphasis placed on practical "learning by doing," rather than formal classroom theory. The guide covers all aspects of the course, including initial preparation, the objectives of the programme, the principles behind its design, its organization, and the systems used to evaluate both trainees and the overall training programme. There are detailed lists of the roles and responsibilities of the course coordinator and group guides, and sets of guidelines and instructions for faculty staff and trainees. The itemized day-to-day programme is also presented. This comprises the objectives, descriptions, and daily schedules for the six stages of training, i.e., preparation; knowing the area and community; individual and community health, and critical analysis of a public health programme; development of a plan for health education on a specific problem; implementation of this plan; and finally, evaluation of the training programme. An appendix to the guide provides alternative daily schedules specifically designed for family planning workers.

1153 India, Ministry of Health and Family Planning. *National health scheme for rural areas: part "A"- background.* New Delhi, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 47p. Engl.

Unpublished document.

A comprehensive health care system for India, based on multipurpose health centres in each community development block, was launched in 1952. There is still, however, an imbalance between the basic health services available in the rural districts and those in urban areas. One scheme to help balance them is to retrain many of the 300 000 practitioners who are registered in the traditional Indian systems of medicine. It would then be possible to have one such practitioner for 2 000 population, or for three to four villages. He could initiate programmes in health, sanitation, nutrition, family planning, etc. This document describes recruitment of these rural medical practitioners, training facilities required, financial aspects, administrative organization, and the staffing requirements. A nationwide pilot project is proposed as the first stage in introducing the scheme. Appendices include a schedule for the 16-week training course, a list of items to be provided in the medical kit, an outline of the format of a training manual, and a complete financial analysis of the scheme.

1154 India, Ministry of Health and Family Planning. *Basic health worker - training of.* New Delhi, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 37p. Engl.
Unpublished document.

To implement various national programmes in India, several categories of auxiliary health worker have been created – vaccinators, surveillance workers, health assistants, etc. The many different training centres required and the problems of finding employment for the new personnel at the end of each mass programme, have renewed arguments in favour of a general purpose health worker. A new category – the basic health worker – is therefore being introduced, whose duties would encompass disease surveillance, health education, vital statistics collection, family planning counseling, first aid, and sanitation. This document provides details of the job description, service conditions, the training course (which could also form the core of the training course for those specialized categories being retained), the training staff and facilities required, and the qualification and selection of candidates. A course timetable and detailed syllabus are also included.

1155 India, Ministry of Health and Family Planning. *Sixty working days course in health education: syllabus.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 6p. Engl.
Unpublished document.

To meet the urgent need for health educators in India, an intensive 60-day course was developed to increase the number of educators being produced per year. This in-service course is open to health educators from different levels of state and national health programmes and various teaching institutions. Its aim is to develop the educator's ability to diagnose health education needs in a community and to implement and evaluate programmes to meet these needs. Training is job-oriented, skill-focused, and field-based (the participant spends over two-thirds of his time in the field). Course content includes the following: family planning, public health (including the organization of the national health programme and health services in general, demography, etc.), social/behavioural sciences, and health education methodology for use in communities as well as institutions. The course curriculum is included.

1156 India, Ministry of Health and Family Planning. *Thirty working days course in extension education.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 4p. Engl.
Unpublished document.

A 30-day course has been designed to equip district extension educators in India with the knowledge and skill necessary for launching and supervising a systematic family planning education programme. The course is highly practical; three-quarters of the student's time is spent doing field work, and assignments are designed to train students in problem-solving. Examples for topics of discussion include "Rumours in family planning – strategy for counteraction," and "Family planning programme in an industrial organization – developing a plan of action." Course objectives, methodology, and content are outlined.

1157 Janssens, P.G. Institut de Medecine Tropicale Prince Leopold, Anvers. *Medical cooperation as a realistic and heart-felt joint venture.* Acta Tropica (Basel), 29(4), 1972, 291-299. Engl.

The rural aid centre, Ifakara, Tanzania, trains medical auxiliaries to provide rural areas with basic health services. The first session began in July 1961, with the training of 38 participants as medical assistants; in 1962 the training programme was modified to upgrade medical assistants to "assistant medical officers." In 3 years, 100 of the latter were graduated. In addition, a 6-month course was organized for health auxiliaries (the future assistant health officers) and a Tanzanian staff to teach in Swahili was hired. Since 1964, the centre has been affiliated with the Medical Faculty of the University of Dar es Salaam for the training of students in rural and community medicine. An important feature of the centre is its living quarters: these have been carefully designed to expose students to better, yet easily replicated, housing and sanitary facilities. The evolution of the rural aid centre illustrates how a well-advised and balanced assistance project can be adapted to changing needs.

1158 Jeffrey, J.C. *Use of paramedical personnel in the tropics.* Industry and Tropical Health (Boston), 7, 1970, 146-151. Engl.
Seventh Conference, Industrial Council for Tropical Health, Boston, 28-30 Oct 1969.

The medical director of Firestone Plantations Company, Liberia, illustrates the value of deploying auxiliary health personnel and discusses the training and utilization of indigenous health aides on the Firestone Plantations. The population served comprises 16 000 employees and their dependents living in scattered villages in an area of 200 square miles. Primary care is provided by the health aides, each of whom lives in, and is responsible for, one of the plantation's 45 divisions. The health aide treats minor ailments, carries out preventive work, and refers more serious cases to either the hospital or the regional health centre, which is visited daily by a physician and staffed permanently by experienced graduate nurses. Criteria for referral of patients are rigid; these are impressed upon the aide during training, so that he will be confident in handling cases within his capability but will not exceed it. His training also emphasizes that skill, equipment, and facilities must be equated with need – a principle that could well be kept in mind in any country where need is great and resources limited.

1159 **Jolicoeur, P.** *L'aide medicale aux pays en voie de developpement: une revue des opinions actuelles. (Medical assistants in developing countries: a review of current opinions).* Laennec Medical (Quebec), 19(3), Jan-Feb 1968, 3-20. Fren. 143 refs.

The medical problems in developing countries are discussed, and desirable characteristics of foreign medical aid are outlined under the headings of objectives, prerequisites, and orientation. Objectives include: establishing a medical climate compatible with the creation of a "modern" society; transmitting not "inventions," but a "spirit of inventiveness"; and teaching the people how to help themselves. Prerequisites include: information on the physical and mental health of the population to be served; the establishment of priorities; the existence of an adequate administrative system in the host country; and direct contact with, and cooperation on the part of, those being served. Finally, medical aid should be oriented toward prevention, should be long-term and continuous, and adapted to the particular culture it sets out to help.

1160 **Kadish, J., Long, J.** *Training of physician assistants: status and issues.* Journal of the American Medical Association (Chicago), 212(6), 11 May 1970, 1047-1051. Engl. 8 refs.

The training and job description of the physician assistant and several issues concerning his utilization are discussed in relation to the United States. Various proposals for training programmes are briefly examined, and programmes currently under way are summarized according to admission requirements, length of training, awards, and function after training. Under the heading of "Considerations for Program Development," the following issues are discussed: determination of duties, functions, and responsibilities that can be transferred from physician to physician assistant; determination of the need for a new occupation versus an extension of an existing occupation; the organization of physician assistant programmes; the setting in which physician assistants should be trained; opportunities for career development; sources of candidates for physician assistant programmes; relationship to costs of medical care; professional and consumer acceptability; and legal implications. Finally, a suggested sequence for programme development is outlined.

1161 **Kent, J.A., Smith, C.H.** *Involving the urban poor in health services through accommodation: the employment of neighborhood representatives.* American Journal of Public Health (New York), 57(6), Jun 1967, 997-1003. Engl.

A programme involving the employment of neighbourhood representatives to recruit disadvantaged clients to health care services (in this case a new maternal and infant care centre in an American city) met with considerable success. The neighbourhood representatives, women over age 35 and resident in the neighbourhood, were given a 2-day orientation in project goals and philosophy, after which they conducted home visits, initially accompanied by a professional and then alone. From this point, the training process evolved from problem identification, to problem analysis, and finally to problem solving. The utilization of neighbourhood representatives increased clinic attendance by 42%; in addition a higher percentage of unwed mothers were reached and expectant mothers were recruited earlier in pregnancy.

1162 **King, M.** *Auxiliary - his role and training.* Journal of Tropical Medicine and Hygiene (London), Dec 1970, 336-346. Engl.

With reference to Zambia, Malawi, Tanzania, and other developing countries, deficiencies in auxiliary training and deployment are pointed out, and some practical remedies suggested. The author uses a model called the "skill pyramid" to illustrate the ideal task distribution within the health team; the personnel at the top (physicians) aim at diffusing skills, through teaching, down the pyramid to the humblest and most economical cadre capable of putting them into practice satisfactorily. The success of such a model depends to a great extent on the role of the physician as teacher and manager of the team, a role for which he is seldom prepared. It is suggested, therefore, that the undergraduate training of the medical student in relation to the auxiliary include: practice teaching, management theory and group dynamics, health and health manpower planning, and practical experience in working with the auxiliary. It is also suggested that steps be taken to open up more channels of information concerning and of concern to auxiliaries and auxiliary educators throughout the world. The author concludes that relatively small amounts of money spent on the general improvement of the numbers, quality, and utilization of auxiliaries could yield substantial returns in terms of public health.

1163 **King, M.** *Auxiliary.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford

University Press, 1966, Chap.7. 10p. Engl.
See also entry 785.

The auxiliary is defined by WHO as a technical worker in a certain field with less than the full professional qualifications. Although auxiliaries are to be distinguished from doctors and paramedical staff (e.g., registered nurses and laboratory technicians), in practice they often must substitute for them and frequently they become extremely competent in their particular field. Auxiliaries can be classified arbitrarily according to their level of basic education (6-12 years), the quality of their vocational training, and their medical specialty. One type of auxiliary in particularly high demand is the "comprehensive nurse" (a combination of nurse, midwife, and public health worker), and ideally a training school for this category should be established in every district hospital. The knowledge and skills of auxiliaries can vary enormously, and therefore when a doctor is first starting to work with them, he must assess their capabilities and adjust his own practice accordingly. He must also continue to train them – there is an urgent need for suitable manuals written specifically for the different types of auxiliary. Finally, it is important to maintain their morale by paying attention to career structure, rewards, status, and acknowledging their value in the medical community.

1164 Kroushev, H. *Training secondary medical staff in Bulgaria.* Nursing Mirror (London), 126(9), 22 Mar 1968, 28. Engl.

This article outlines the training courses and working conditions for different types of medical auxiliary in Bulgaria, where expansion of public health and medical research activities has amplified the need for well-trained auxiliaries. During 1965-66 there were 22 schools for auxiliary personnel, training young high school graduates as midwives (2 1/2-year course), feldshers (3 years), clinical and laboratory assistants, general nurses, assistant pharmacologists, "dental mechanics," rehabilitation specialists, and dietetic instructors (all 2-year courses). In 1966, the public health service employed 35 000 people, of whom 4 188 were feldshers, 4 470 midwives, and 18 859 nurses; the author emphasizes that these auxiliary medical workers enjoy a salary and working conditions commensurate with their important responsibilities and duties.

1165 Laib, A.M., Goriup, S. *Experiment in Algeria.* World Health (Geneva), Jun 1972, 16-21. Engl.

To fill the gaps created by the migration of European medical personnel from Algeria following its independence, nursing and military health worker services were established. In an effort to improve the quality of care and to intensify preventive efforts, a rural bias has been introduced in national planning in the form of programmes to train and deploy medical auxiliaries to staff rural health centres. The duties of the auxiliary include diagnosis, referral, and supervision of the work of the health team. In-service training is emphasized. Work of the WHO-sponsored development programme for training medical assistants and public midwives at the Institute of Health Technology, Constantine, is described. This institute will provide in-service refresher training for workers already placed in field posts.

1166 Mahidol University, Faculty of Public Health, Bangkok. *Faculty of Public Health: 1973-1974 bulletin.* Bangkok, Mahidol University, Faculty of Public Health, 1973. 46p. Engl.

This is the curriculum guide and calendar for the Faculty of Public Health, Mahidol University, Bangkok, Thailand. The purpose of the faculty is to provide college-level training for personnel who will staff the nation's health services; to promote progress and innovation in health science through research, surveys, field practice, workshops, and seminars; to cooperate with its international counterparts and other health agencies; and to provide community health services through various programmes. The faculty comprises 12 departments, all of which have access to a year-round community health training and research centre. This centre has facilities for survey and research and provides staff and students with opportunities to practice rural health care and to cooperate with the Ministry of Public Health in providing the local community with health services.

1167 Martens, E.G. *Culture and communications: training Indians and Eskimos as community health workers.* Canadian Journal of Public Health (Toronto), 57(11), Nov 1966, 495-503. Engl.
See also entry 1319.

Effecting positive changes in public health by eliminating prejudice was the aim of this project to train indigenous Eskimos and Indians as community health workers. The Medical Services Branch of Health and Welfare Canada hypothesized that natives, designated as leaders by their tribes or at least accepted as workers, could best help their people identify health problems and solve them. Candidate selection was based on personal leadership, rather than academic standards, and effort was made to acquaint the trainees with their future supervisors. During orientation, which lasted 2 months, trainees were asked to gather information about the professional "outsiders" in their communities, resources and services available, and prevalent health problems as well as peoples' attitudes toward them. The final 3 months of training were spent in information sessions, i.e., filmstrips, demonstrations, talks about the data collected during orientation, and informal discussion among trainees. Initial evaluation of the programme has been favourable but follow-up study is recommended.

1168 Moodie, A.S., Rogers, G. *Baltimore uses inner city aides in a tuberculosis control program.* Public Health Reports (Washington, D.C.), 85(11), Nov 1970, 955-963. Engl.

Both the shortage of professional staff and the increasing proportion of tuberculosis therapy amenable to administration on an outpatient basis prompted health planners in Baltimore, Maryland (USA), to train a

paramedical staff of carefully selected health aides for a tuberculosis control project. These aides work in the chest clinics, performing various nonclerical duties, and also in the field, ensuring patient follow-up. Aide selection was made on the basis of personality factors rather than education or work experience. Although the attrition rate was high during training, it was abnormally low thereafter: over a 3 1/2-year period, only one of the 23 health aides resigned. Advantages of deploying health aides rather than professional nurses in this function were: the health aide, being centred in the chest clinic, was easier to direct than the district nurse located elsewhere; aides worked part-time in the clinic and part-time in the field, establishing continuity of care and more personalized service to the patient; and health aide salaries were considerably less than professional salaries. Five years of health aide deployment have resulted in: (1) a 50% increase in patient visits to the clinic; (2) a saving of $90 000 in field work and $25 000 in clinic work in 1 year alone; (3) the restoration of 23 tuberculosis alcoholics to self-support through counseling sessions conducted by aides; and (4) an increase in the overall efficiency of the project.

1169 **Morgan, R.H.** *Physician assistants: their role in medicine in the years ahead.* Journal of the Maine Medical Association (Brunswick), 59(11), Nov 1968, 219-223. Engl.

The author comments on the potential for physician assistants to alleviate the health manpower shortage. Medical education in the USA has evolved into a lengthy procedure that is unable to generate a sufficient number of doctors. Although it might be possible to increase the numbers of students, it would be several years before the benefits became apparent; shortening the course would introduce doubts as to the proficiency of the new medical graduates. But there is a definite place in the medical team for a physician assistant who is educated to a level midway between the nurse and the physician. A 2-year training programme for physician assistants at Duke University is briefly described. The author recommends that the most appropriate training centres would be medical schools, which must therefore broaden their educational responsibilities and make more comprehensive use of their facilities to include the training of assistants, nurses, and other paramedical staff.

1170 **Morton, E.J.** Papua New Guinea, Department of Public Health. *Aid post orderly: the current programme in Papua New Guinea.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 618-619. Engl.
See also entry 823.

Responding to the demand for a health worker at the village level and accepting that some form of medical care should be available to every person, the public health department of Papua New Guinea recommenced the training of "aid post orderlies" in 1972, after an interval of 3 years. The new training programme centres on functions that an orderly in rural areas would perform, and consequently, the syllabus stresses curative medicine (i.e., treatment of common illness and injuries), although other aspects, such as health education, hygiene, community participation, are also included. The trainees, nominated by their local government council, receive 12 months of theory followed by 12 months supervised practice at approved rural health centres, preferably located in their home district. The facilities, teaching staff, selection procedures, and financing for the training programme are briefly described.

1171 **Murthy, G.S.** *Basic health worker and his place in public health programmes.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 148-149. Engl.

The Indian basic health worker (BHW) was introduced in 1965 to provide surveillance in the national malaria eradication programme and to assist in family planning activities. However, minimal training and division of effort has caused the quality of work to suffer. Also, in the past the BHW has not had adequate supervision and support from the poorly motivated medical officers at the primary health centres. India needs its BHWs to implement its many health programmes; what the BHWs need is better training, precise direction, and adequate supervision. It is recommended that the BHW be provided with 6 months institutional training; with this foundation, his responsibilities could gradually increase.

1172 **Nesterov, V.A.** USSR, Ministry of Public Health. *Role and significance of the feldsher in rural medical care.* Moscow, Ministry of Public Health, Central Institute for Advanced Medical Studies, 1967. 12p. Engl.
Paper presented at WHO Travelling Seminar on the Training and Utilization of Medical Assistants.

The activities of a feldsher and midwife post in isolated rural communities of the USSR are detailed. The scope of the feldsher's work encompasses sanitary and epidemic control measures, health education, and therapeutic and preventive aid (including emergency care, vaccination, drug prescriptions, etc.); complicated cases are referred to the nearest hospital or are treated by a visiting physician. The midwife receives the gynaecological outpatients, in addition to providing pre- and postnatal care and looking after the health of those infants under 1 year; the majority of births take place at the post. The feldsher and midwife also assist in the systematic medical screening of the population and subsequent monitoring. The work plan for the post is approved annually by the chief doctor of the local rural hospital. Usually an individual doctor is assigned the responsibility of supervising a particular post – he makes regular visits, provides consultation, checks the quality of work, and gives further guidance. The paper also describes the organization and layout of a typical post, its essential medical and other equipment, the working conditions of the staff, and the provisions for further training.

1173 **Paton, T.J.** *Scheme for training medical auxiliaries.* In McGilvray, J.C., Simmons, G., Review of Health Services in Botswana with Particular Reference to Mission Medical Services, Geneva, Christian Medical Commission, 1972, Appendix II, ii-v. Engl.
See also entry 790.

In a small rural health project in Mahalapye, Botswana, a training programme for auxiliary health workers was undertaken. In it women were given a 6-week course in first aid, health education, antenatal care, child care, immunization, and the recognition and treatment of the most common minor ailments. A list of drugs that could safely be administered by the auxiliaries was drawn up. The women selected for training purposes were over 21 years old, married, and generally had children. They were required to have a Standard VII education and a good knowledge of English. Each would work in her own village. Results were reasonably satisfactory; attendance at children's clinics and antenatal classes improved, although villagers still preferred to leave treatment to the visiting medical officer. The importance of maintaining close contact between the medical officer and the auxiliaries is emphasized, and the training of more auxiliaries for deployment in schools and villages is highly recommended.

1174 **Peru, Ministry of Health.** *Informativo del curso para tecnicos en estadisticas de salud y registros de atencion medica. (Information course for technicians in health statistics and health care records).* Lima, Ministry of Health, 1974. 61p. Span.

This training course, offered by the School of Public Health, Lima, Peru, attempts to qualify medium-level personnel to analyze and solve health problems, collect statistics, and maintain health records. It consists of two semesters constituting a total 1 491 study hours and covering the following subjects: statistics in epidemiology; public health administration; maternal and infant health care; environmental sanitation; health education and behavioural sciences; and nursing. The curriculum is divided into four stages: the first stage (353 hours) deals with general academic knowledge; the second (489 hours) deals with basic medical knowledge; the third (454 hours) covers subjects pertinent to the speciality; and the fourth (195 hours) comprises practical field experiences.

1175 **Rahman, A.** *Consideration of current educational concepts in training trainers of basic health workers.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 34-36. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

A distinction is made between two levels of India's basic health worker trainers: the manager-trainer and the operator-trainer. Each has its own function, although both may be combined in one person. The manager-trainer is responsible for organizing the training, creating the learning environment, and delineating and delegating responsibility to the people involved in the educational system. The operator-trainer is responsible for teaching in the classroom or in the field. A possible combination of the two functions exists in the teaching team, where one member is the manager-trainer and the rest are the operator-trainers. Examples are given of the skills needed to successfully fulfill these roles.

1176 **Ray, B.** *Comprehensive health care and medical social worker.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 136-137. Engl.

The medical social worker (MSW) could play a valuable, wide-ranging role in a comprehensive health care programme by providing an important link between the medical corps and members of the community. The author lists the following potential areas of activity: (1) health programme planning (surveying local beliefs and habits and modifying a plan accordingly); (2) hospital service (monitoring the social component of illness); (3) treatment supervision (interpreting the physician's instructions); (4) home visits (studying living conditions and advising on prevention of spread of infection); (5) cases of treatment refusal (convincing the patient of the need and effectiveness of treatment offered); (6) checking contacts; (7) provision of recreational facilities; (8) liaison work; (9) rehabilitation; (10) aftercare; (11) public relations; (12) health education; (13) health data collection and evaluation; (14) participation in special services, e.g., school health, physically handicapped, family planning, MCH, nutritional education centres, etc. The author appeals to the health authorities to give the MSW enough scope and opportunity, and to take full advantage of his potential contributions.

1177 **Riley, P.L.** *Health officer and health education: functions of health educators.* American Journal of Public Health (New York), 42, Jun 1952, 679-686. Engl.

South American health officers, with few exceptions, think of health education in terms of pamphlets, posters, films, etc., that can be distributed without introducing a new type of specialist – the health educator. But the author maintains that this professionally trained person is required to develop a meaningful health education programme, which can then be implemented via doctors, nurses, and inspectors. He describes the six main areas of activity of the health educator: programme planning, in-service training, preparation of educational materials, coordination with other agencies and departments, publicity and propaganda, and community organization/participation. For each of these areas there is a discussion of target groups, methods and materials, objectives, and also some examples of the ways in which the work of the health educator will benefit other health personnel.

1178 **Roemer, R.** *Legal scope of dental hygienists in the United States and other countries.* Public

Health Reports (Washington, D.C.), 85(11), Nov 1970, 941-948. Engl. 28 refs.

The author reviews the successful introduction of dental nurses and other dental auxiliaries in many different countries, particularly New Zealand and Malaysia, and argues that widening the scope of functions for dental hygienists in the USA could help meet the public's demand for improved dental services. The Malaysian scheme closely parallels the one pioneered in New Zealand in 1921. Nurses are primarily concerned with dental health education and filling and extracting the teeth of school children; they undergo 2 years of academic training (4 months preclinical, 20 months clinical) followed by 16 months of field training. In contrast, dental hygienists in the USA also receive 2 years of academic training, but are severely restricted by legislation as to the procedures they may undertake. Experimental studies, however, and the experiences of certain states with more liberal laws have demonstrated that dental hygienists can greatly contribute to the dental service when they are permitted to administer local anaesthetics, insert fillings, perform gingival curettage, etc. Standards would not be lowered provided there were adequate supervision and additional training for these new duties; at the same time, much of the hygienists' former prophylactic work could well be carried out by auxiliaries with less comprehensive training.

1179 Ronaghy, H.A., Solter, S.L. *Auxiliary health worker in Iran.* Lancet (London), 2, 25 Aug 1973, 427-429. Engl.

Health care needs of Iran's 55 000 villages are presently served by a health-corps system whereby all medical graduates eligible for the army are drafted into rural rather than military service. The medical graduate is posted to one of Iran's 400 health-corps stations where he spends 3 days a week seeing patients at the station and 2 days conducting mobile clinics in the outlying villages. In theory, his work includes preventive medicine, health education, family planning, and improvement of village sanitation, but in practice, it is limited to curative services. This is partly because his aides (high school graduates) do no screening work, but simply carry out simple orders under the doctor's supervision. A recent analysis of the ailments encountered at the primary level strongly mitigates in favour of the establishment of a more responsible cadre of auxiliary. Over a 17-month period, it was found that 93% of the conditions seen by the physician were amenable to treatment with limited clinical facilities and that 80% of these could be adequately dealt with by someone less trained than a physician. A 2-year pilot study is currently under way to train, evaluate the performance of, and discover the most effective role for 14 village health workers from an area around one rural health station; plans for a school for auxiliary health workers (located in a rural area) have received the approval and support of the Iranian government.

1180 Rosinski, E.F. *Physician's assistants. A review of their status.* Israel Journal of Medical Science (Jerusalem), 7(5), May 1971, 697-700. Engl.

In this short review, the author acknowledges general opposition to a new type of health worker, the physician assistant. In the health manpower pyramid, this auxiliary is below the physician, above the registered nurse, although doubts over his specific duties and responsibilities have provoked arguments about his value to the health team. Some suggest that the benefits from having the extra manpower are negated by such problems as the assistant's "second-class" doctor status, the tendency to assume too much responsibility, and the need for supervision. There are fears that medical service will deteriorate and that development of medical education will be neglected; there is further controversy over what, if any, opportunities should be made available for additional training. However, the author believes that better planning of the programme for training and utilization of the auxiliary could eliminate many of these problems. The primary task is to define clearly the duties and responsibilities of the assistant; then the objectives of the training programme can be established, and, in turn, the most appropriate content and presentation. The author believes that with clearly stated and soundly developed professional roles and educational objectives, the physician assistant will prove to be a successful member of the health team.

1181 Rosinski, E.F. *Impact of technology and evolving health care systems on the training of allied health personnel.* Military Medicine (Washington, D.C.), 134, Jun 1969, 390-393. Engl.

The author forecasts the influence that technology and evolving health care systems will have on the education and training of allied health personnel. His proposals are as follows: (1) curricula must be reviewed continuously and must be flexible enough to accommodate new developments and delete obsolete material; (2) the "core curriculum" concept should be adopted whereby only the directly relevant aspects of each discipline are presented to the student; (3) self-learning skills must be developed in the students via programmed texts, teaching machines, etc. to prepare them to assimilate new technology after graduation; (4) new levels of health workers should be created for handling specialized but routine functions related to new technology; (5) auxiliaries therefore should develop management skills for on-the-job training and supervision of these new workers; (6) general awareness and skill in the basic principles of education should be considered in staffing training institutions; (7) students and faculty must become more involved in research on health care delivery, e.g., relevance of the education of different health workers to their jobs, degree of overlap in the utilization of the different types of worker, etc.; and (8) health educators must generate, both in faculty and students, a receptiveness to change.

1182 Rosinski, E.F., Spencer, F.J. *Training and duties of the medical auxiliary known as the assistant medical officer.* American Journal of Public Health (New York), 57(9), Sep 1967, 1663-1669. Engl.

Consideration is given to the possibility of introducing a new cadre of health worker – the auxiliary medical officer (AMO) – into the American health care system. The selection, training, and duties of AMOs as found in developing countries are generally discussed, some weaknesses in their present training and/or utilization are pointed out, and some warnings are signaled regarding their role and career. The author concludes that the AMO has proven valuable in developing countries and could prove likewise in the USA, where society is demanding, despite a limited number of physicians, the expansion of medical services.

1183 Ruttonjee, D.J., Lo, K.S., Chun, D.W., Fang, H.S., McRobert, J.C., Browne, E.N., Noren, L.E. *Report of advisory committee on clinics.* Hong Kong, Department of Medical and Health Services, Advisory Committee on Clinics, Mar 1966. 84p. Engl., Chinese.

A government advisory committee, appointed in 1965, investigates and suggests regulations for low-cost medical clinics in Hong Kong. Of particular concern are the activities of the several hundred unregistered medical practitioners who staff many of the clinics. As there are insufficient numbers of registered doctors to provide a comprehensive health service, the committee acknowledges the need for these practitioners and the contribution their clinics are making. In order to improve the standards of service, however, the committee recommends that hospital refresher courses be organized for these practitioners, further examinations be held, and the distribution of clinics be improved.

1184 Sadler, A.M., Sadler, B.L., Bliss, A.A. *Physician's assistant: today and tomorrow.* New Haven, Conn., Yale University Press, 1972. 256p. Engl.

The authors (a physician, a lawyer, and a nurse) have combined their professional insights to provide a unique overview of issues confronting the newest health care professional – the physician assistant (PA). While recognizing the great promise of the PA for improved health care, they highlight some of the many problems that lie ahead. Aware of what the past can teach about the development of health professions, they also raise issues of distribution, economics, education, task delegation, and protection of the public. Interdependent relationships of PAs with other health care professionals are advocated and the reorganization of health care workers into health teams is supported. The emerging PA profession is urged to circumvent prideful professionalism and to focus on improving patient care. To anyone familiar with health care in the U.S., it is clear that many issues facing the physician's assistant also plague the larger health care system. Although the authors do not profess to have simple "answers" to the numerous issues they raise, their candid analysis leads to carefully articulated recommendations. This timely and informative book should stimulate productive dialogue and investigation toward improved patient care. (From the foreword.)

1185 Sankale, M., Ba, H. *Problemes de la formation du personnel paramedical au Senegal. (Problems of training paramedical personnel in Senegal).* Semaine des Hopitaux (Paris), Semaine Medicale, 39(20), 20 Dec 1963, 415-417. Fren.

The obstacles to creating an adequate cadre of paramedical personnel in Senegal are examined. The major problems overlap but fall into areas of recruitment, training, and utilization. The recruitment problems are "quantitative and qualitative": the numbers needed to staff the health services are overwhelming, but the numbers of persons educated sufficiently to enter formal training are few. Certified midwives, medical assistants, and nurses are rare, but there is a plethora of nursing aides and practical nurses. Training should be better adapted to the needs of a developing country (a social, preventive medicine as directed by the Senegal Plan for Economic and Social Development). To preserve professional competence, more continuing education should be made available. The final problem – utilization – includes the maldistribution of qualified personnel and the present use of auxiliary personnel without adequate supervision. Any long-term solution to this problem requires that the government upgrade life in outlying villages; meantime every graduate in a health discipline could be required to serve in the government service for 10 years, 2 of which would be spent in rural areas.

1186 Silver, H.K. *New types of health professionals for developing and developed countries.* Indian Pediatrics (Calcutta), 10(10), Oct 1973, 567-570. Engl.

Allied health workers and nurses should be capable of fulfilling the need for increased and improved health care, but too often their training has been aimed at preparing a relatively low level worker with very limited responsibility – a subordinate health technician. The author presents the case for better-trained health workers with more autonomy, who could serve as physicians' associates or substitutes rather than merely as physicians' assistants. The University of Colorado (USA) operates several programmes to prepare associate-level health personnel capable of providing extensive primary care. For example, registered nurses can take a postgraduate course (usually 4 months) to specialize in pediatrics, geriatrics, family welfare, or obstetrics. At a higher level, there is a 3-year training programme for child health associates; its graduates have outpatient, diagnostic, and clinical skills comparable to those of qualified pediatricians. The author believes that these categories of health personnel have the background, understanding, and proficiency to assume responsibility in outpatient care and that the training programmes could be adapted to the needs of developing countries throughout the world.

1187 Silver, H.K. *Syniatrist: a suggested nomenclature and classification for allied health professionals.* Journal of the American Medical Association (Chicago), 217(10), 6 Sep 1971, 1368-1370. Engl.

To clarify terminology describing allied health professionals, the author has recommended that a new term, "syniatrist," defined as "an individual practicing in association, union, or together with a physician," be adopted as the generic name for health professionals who carry out functions and activities traditionally performed by physicians. The name syniatrist would apply only to health workers who have direct contact with patients in providing health care under a physician's supervision. A classification of syniatrists is proposed with two principal subdivisions: (1) area of specialty of practice, and (2) relationship of syniatrist to physician. The latter subdivision would be based on the degree of independence and competence expected from the syniatrist in the application of his professional skills. (Author abstract.)

1188 Smith, R.A., Bassett, G.R., Markarian, C.A., Vath, R.E., Freeman, W.L., Dunn, G.F. *Strategy for health manpower: reflections on an experience called medex.* Journal of the American Medical Association (Chicago), 217(10), 6 Sep 1971, 1362-1367. Engl. 8 refs.

The authors describe how the medex programme can help overcome the physician shortage in the USA. This programme has created a new class of medical professionals by taking advantage of the training medical corpsmen receive in the armed forces; working with a physician, the medex relieves the practitioner of much routine work not requiring a physician's sophisticated knowledge and skill (e.g., suturing minor lacerations, taking histories, home visiting). A student studies for 3 months in a university to complement his military medical training and then trains for 12 months with the physician who will ultimately employ him. This article describes some of the steps involved in the medex programme – the need for collaboration between schools of medicine and general practitioners, the legal complications, the professional status of the medex, student selection criteria, and design of relevant training. A considerable amount of discussion is also devoted to the problems of health manpower nomenclature, and a scheme is proposed whereby terminology is based on tasks performed rather than hierarchical position.

1189 Soutter, L., Cannon, R.O., Estes, E.H., Hudson, C.L., Rosenberg, C.A., Sleeper, R. Ad Hoc Committee on Allied Health Personnel, Division of Medical Sciences, National Research Council, National Academy of Sciences, National Academy of Engineering, Washington, D.C. *Allied health personnel; a report on their use in military services as a model for use in nonmilitary health care programs.* Washington, D.C., National Academy of Sciences, 1969. 25p. Engl. 33 refs.

Allied health personnel in the American military are examined to determine whether they, or similar cadres of health personnel, could be effectively used outside the armed services. The corpsman enters the armed forces without training or experience in the health field, completes a course in basic health care, and is then assigned to a military hospital or clinic for duty. Experience has proved that this short, intensive training plus in-service training adequately provides the corpsman with the skill to perform many basic procedures under supervision. He may undertake specially defined physical examinations, treat minor illnesses and injuries, apply casts and traction following fractures, collect blood for transfusion and/or analysis, start intravenous therapy, administer and supervise drug therapy, and perform vaccinations. Unfortunately, at the moment, there are few career patterns in civilian life comparable to that of the military corpsman, and consequently, of the 30 000 corpsmen released each year, few remain in the health field. The study committee recommend, therefore, that leaders in civilian medicine learn from the military experience better ways of training and using support personnel.

1190 St. John Ambulance Association, London. Macmillan Journals, London. *Occupational first aid.* London, Macmillan Journals, 1973. 43p. Engl.

This concise reference manual for first-aid workers was developed in response to the need for occupational first aid in factories and construction sites in Britain, but it could also prove useful in other parts of the world. The six chapters cover the following topics: the duties and responsibilities of the first-aid attendant (including record-keeping, maintenance of first-aid facilities, etc.); treatment of minor injuries; treatment of minor illnesses; emergencies and major incidents; anoxic states and their treatment; and the "first-aider" and safety (which deals with preventive safety measures and propaganda).

1191 USA, Department of Health, Education, and Welfare. *Standard surgical techniques in the People's Republic of China.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(NIH)74-372, 1973. 577p. Engl.

Translation of a Chinese surgical manual compiled by the Shanghai Medical Institute No.2, Shanghai, 1971.

This manual was compiled for use by medical personnel in the rural and mountainous regions of China. The various chapters cover the following topics: disinfection and antisepsis, basic surgical procedures, pre- and postoperative management, anaesthesia, emergency operations, cranial surgery, thoracic surgery, urological surgery, and gynaecologic and obstetric surgery. The manual is illustrated, and step-by-step procedures are outlined.

1192 Vaughan, P. *Medical assistant in Papua and New Guinea.* Papua and New Guinea Medical Journal (Konedobu), 11(3), Oct 1968, 81-84. Engl. 8 refs.

The author disputes the contention that the medical assistant in Papua New Guinea is a substitute doctor or a glorified outstation nurse and counters that he is a

health worker in his own right. But he requires a training programme geared to his particular needs – a simplified doctor's training or a supplemented nurse's course is inappropriate. As a community health worker, the medical assistant administers a health centre and its field services and provides basic integrated (i.e., curative and preventive) health services. He must become involved in a range of activities – disease control, environmental sanitation, etc. – and must also create an awareness of personal and community responsibility for health. Because of these duties his character is as important as his medical knowledge or technical ability. He must be mature and possess initiative, a strong sense of responsibility, confidence in himself, pride in his work, administrative ability, and be capable of organizing, training, and supervising his staff. He must understand the local way of life and, above all, must be prepared to live and work happily in a rural area. A 3-year training course, which is designed to consolidate both technical knowledge and these personal qualifications, is outlined in the paper.

1193 **Watson, E.J.** Papua New Guinea, Department of Public Health. *Health extension officer and health inspector.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 613-617. Engl.
See also entry 823.

Two categories of health workers in Papua New Guinea are described (the health extension officer and the health inspector); the article outlines the content of their 3-year training courses, entrance qualifications, and some of the positive and negative aspects of their work in the community. The health extension officer is a multipurpose health worker who supervises a rural health centre and its field activities. The policy is to adapt training to the job situation and to develop attitudes and skills that will enable the trainee to make decisions on clinical, public health, and administrative problems. The second type of health worker is the health inspector, whose training is specifically oriented toward the health needs of a developing country. He is the country's main preventive health worker, but at present he mostly serves urban rather than rural areas.

1194 **Watson, E.J.** *Preparation of the health auxiliary.* Papua and New Guinea Medical Journal (Konedobu), 13(1), Mar 1970, 21-22. Engl.

The principal of Para-Medical Training College, Madang (Papua New Guinea), offers some advice on the introduction of health auxiliaries. Unlike professional staff, auxiliary health workers in developing countries are affordable, they remain highly motivated in rural locations, they need only a short training period and can thus be produced rapidly, and they are able to communicate effectively with the local people. Although multipurpose health workers may tend to neglect preventive and promotive work because of interest or prestige in curative medicine, they still can provide a range of services that in developed countries would often require several specialists. (Some specialized auxiliaries will also be required, however, e.g., malaria spraymen.) An auxiliary will be helped if a fairly rigid and detailed work timetable is laid down for him, with his training closely adapted to this schedule. The training course must compensate for the lack of basic knowledge by employing repetition, emphasis, and as much practical work as possible. Also, the teacher must ensure that the students fully comprehend their work by holding regular tests and projects and by visiting graduates in the field.

1195 **WHO, Geneva.** *Modern teaching methodology in the training of the health team.* WHO Chronicle (Geneva), 24(10), Oct 1970, 476-477. Engl.

WHO recognizes the need for teacher training in the health professions if developing countries are to acquire properly qualified health personnel in adequate numbers. A special consultation on teacher training in 1969 resulted in a programme to situate educational specialists in regional centres, in order to train others as educational specialists, thus creating a multiplying effect in teacher training. The need for teaching aids has been recognized, and slides, posters, and other materials have been provided for various programmes. Medical text translation has been undertaken in Latin America, and a programme for the evaluation of teaching aids and equipment is being developed.

1196 **WHO, Geneva.** *Expert Committee on Professional and Technical Education of Medical and Auxiliary Personnel: third report.* Geneva, WHO Technical Report Series No.109, May 1956. 19p. Engl.

A classification of auxiliary health workers by types and levels and a study of general principles and methods to be applied in their training and utilization are presented in this WHO expert committee report on professional and technical education of medical and auxiliary personnel. The delicate balance between the need for supervision and the need for opportunities to use personal initiative on the part of the auxiliary is discussed.

1197 **Wieler, A.** *Physician's substitute - the role of the nurse in the North.* Canadian Journal of Public Health (Toronto), 62(4), Jul-Aug 1971, 333-336. Engl.

The author defines the "physician's substitute" as one who assumes the duties of a registered nurse and, because of the inaccessibility of a physician, carries out duties that a physician would normally perform. As an example of the physician's substitute, the role of the nurse in Canada's North, the range of problems and activities, types of support available, and the personal qualities needed for such a role are discussed. Finally, socioeconomic, cultural, and environmental conditions that affect the nurse's role are presented.

IV.2 Primary nursing care

IV.2.1 Professional

See also: 0726. 0753. 0850. 0965. 0973. 1063. 1067. 1072. 1075. 1084. 1106. 1164. 1166. 1186. 1217. 1219. 1233. 1265. 1269. 1273. 1279. 1282. 1287. 1291. 1296

1198 **American Samoa, Division of Public Health.** *Guide for public health nurses: American Samoa.* Pago Pago. Department of Medical Services. Division of Public Health. 1968. 1v.(various pagings). Engl.
Unpublished document.

This manual outlines the duties of the public health nurse supervisor. the head nurse (public health). the village nurse. and the public health licensed nurse in American Samoa. A chapter on communicable diseases includes a description of their symptoms and treatment and an immunization schedule. as well as a glossary of terms. Measures for insect and pest control are dealt with in a section on sanitation. Also included are chapters on the following topics: obstetrics. school and preschool physical examinations. infant nutrition, medical emergencies. recognition of diseases in various parts of the body. drugs and their uses. and dental hygiene.

1199 **American Samoa, Division of Public Health.** *Public health nursing: postgraduate training curriculum guide.* Pago Pago, Division of Public Health. n.d. 301p. Engl. 200 refs.

A 3-month postgraduate training course in public health nursing has been established in American Samoa for graduates of the local school of practical nursing. The training is intended to produce nurses who can work competently at the village level. This document describes the objectives and organization of the course. which comprises both field practice and classroom theory. In addition to the complete syllabus. there are detailed lecture notes and a corresponding series of worksheets to be completed by the students during the lectures. A bibliography of more than 200 items provides references to publications on specific and general aspects of the public health nurse's work (e.g.. school health. interviewing. preventive medicine) and on nurse training programmes.

1200 **Baker, T.D., Perlman. M.** *Nurses and midwives.* In Baker. T.D.. Perlman. M.. Health Manpower in a Developing Economy. Baltimore. Md.. Johns Hopkins Press. 1972. 77-92. Engl.

This particular chapter of a textbook on the planning of health services and manpower in Taiwan describes the roles of the nurse and midwife, their training. employment opportunities. numbers and distribution pattern. and estimated future supply. There are more than twice as many physicians as qualified nurses in Taiwan, partly the result of the low prestige accorded the nursing profession. Attitudes are changing. however. and several training courses are now available. Even so. approximately one-third of each year's graduates leave the profession within 3 years because of emigration, marriage. teaching in school. etc. Although midwifery is accorded higher prestige. the number of midwives is also grossly inadequate. and training programmes are being expanded. Estimates of the supply of nurses. midwives. and "nurse-midwives" up to 1983 indicate that total numbers trained may be sufficient but that steps need to be taken to ensure that these personnel remain active in their profession.

1201 **Campbell. C.H., ed(s).** Australia. Department of Health. University of Sydney. School of Public Health and Tropical Medicine. Sydney. *Lay course in tropical medicine.* Sydney. University of Sydney. School of Public Health and Tropical Medicine. Service Publication No.12. 1975. 233p. Engl.

The "lay course in tropical medicine" was established in 1931 at the School of Public Health and Tropical Medicine. University of Sydney. It is the only course available in Australia to prepare nurses (also missionaries. planters. and other interested persons) for work in tropical countries. This present volume has been developed from lecture notes issued to students. and is aimed primarily at the trained nurse. Its 25 chapters cover a wide range of relevant subjects. from family planning. through nutrition and environmental sanitation. to the management of specific infectious and parasitic diseases.

1202 **Duvillard, M.** *Services de sante en URSS: role et formation du personnel paramedical. (Health services in the USSR: role and training of paramedical personnel).* Zeitschrift fuer Krankenpflege (Bern). 63(7). Jul 1970. 262-265. Fren.

The rural health services and the role of the various medical and paramedical personnel in the Soviet Union are described by a participant in the World Health Organization Travelling Seminar on Nursing. The Soviet health system is described as being unified in concept and methodology, but decentralized in organization and territorial distribution. Three types of institution serve the rural population: the "oblast" hospital. a large institution (600–800 beds) providing highly specialized services; the branch hospital (300–400 beds). providing general and some specialized services; and finally. the "uchastock" or rural hospital. serving a population of no more than 12 000 persons. Outpatient clinics (polyclinics), providing both preventive and curative services. operate out of the last two; a network of highly specialized clinics provide maternal and child care. To ensure universal coverage, a number of general practitioners attached to the polyclinic each care for a registered group of 2 000 persons in the zone served. The smallest unit of the system is the feldsher/midwife post containing a consultation room and 10-12 beds for maternity cases. and found in a region such as a farm collective where there is a concentration of rural population. The feldsher is a physician assistant trained to perform certain defined functions in an independent

way, e.g., running the post, making diagnoses, referring some patients and treating others, and applying first aid. Like his paramedical colleague, the midwife, he is supervised by a physician from the uchastock hospital with which the post is affiliated. Finally, the role and training of the nurse are outlined in some detail.

1203 **Freeman, R.B.** *Enfermeria en salud publica. (Public health nursing).* Mexico, D.F., Medica Mexicana, 1957. 480p. Span.

This book, intended for use in schools of medicine, nursing, and even social work, deals with the procedures of and problems facing the public health nursing profession as it has evolved in a modern, sociocultural, and economic setting (Mexico). Special emphasis is given to the preventive aspects of both physical and mental health. It is divided into five parts: (1) standard pattern of public health nursing; (2) services to families and to individuals; (3) responsibilities inherent to management and supervision; (4) services in clinics, schools, and worker health programmes; and (5) professional responsibility.

1204 **Greece, Ministry of Social Services.** *Programme of training of the higher school of public health nursing and general nursing.* Athens, Ministry of Social Services, n.d. 9p. Engl.
Unpublished document.

The curriculum for the training of public health nurses in Greece is presented in terms of the number of hours devoted to theory, the number to practice, and the subject matter covered. It comprises 530 hours of theory and 360 hours of practice per term. Theory includes areas of concern that come under the headings "social sciences," "public health and social hygiene," and "professional topics" (i.e., interviewing techniques, group work, methods of case studies, etc.). Practical experience includes work in occupational health, rural hygiene, the antituberculosis campaign, the antivenereal disease campaign, and professional visiting.

1205 **India, Ministry of Health and Family Planning.** *Public health nurse instructors workshop on family planning, New Delhi: a report.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, 5-10 May 1969. 58p. Engl.

The Indian Nursing Council has developed a course in family planning for integration with the general nursing curriculum. This course was the result of a 5-day workshop to strengthen the participants' (public health nurse instructors from different regional family planning training centres) knowledge of the family planning programme and to assist them in organizing family planning training programmes for all nursing personnel in their respective regions. It was also designed to enable them to identify opportunities for introducing family planning into their teaching programmes and job situations. It was found that ample opportunity for integration existed (e.g., with maternal and child health), and that extra teaching hours specifically for family planning would be unnecessary.

1206 **India, Ministry of Health and Family Planning.** *Health education training of public health nurses.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 9p. Engl.
Unpublished document.

The Central Health Education Bureau, New Delhi, India, has designed a training course for public health nurses that will be used as a model in planning similar courses for other health personnel. The course aims at training nurses for their role as health educators. Its designers hope it will prove to be an adequate blueprint for systematically planning, conducting, and evaluating a health education training course. To establish course content, the designers drew from their own knowledge and from the experiences of public health nurses. A multiple choice questionnaire was used to ascertain what the nurses already knew to avoid duplication in the course curriculum. The teaching method consisted of classroom sessions and field assignments in organizing, conducting, and evaluating education programmes. Details of each phase in the planning, implementing, and evaluation of the course are set forth.

1207 **Keith, C.W.** *Role and preparation of the outpost nurse (Canada).* Washington, D.C., Pan American Health Organization, 12 Jun 1973. 7p. PAHO/HR/CPP/D/28. Engl.
Pan American Conference on Health Manpower Planning, Ottawa, 10-14 Sep 1973.

The Medical Services Branch of Health and Welfare Canada provides direct health care to special citizens' groups - registered Indians, Eskimos, public servants, immigrants, and all citizens of the two northern territories. Health care delivery is complicated by the scattered distribution of these people, the several distinctive cultural entities, many dialects, poor communications, temporary isolation of small communities through adverse weather conditions, and patterns of disease that are changing with improved accessibility and development of natural resources. To help overcome these problems, health care is organized at the community level, using nurses located in outpost nursing stations (permanently staffed, with inpatient accommodation) and health centres (no inpatients). The nurses are assigned duties normally undertaken by medical and paramedical professionals, but they are in communication with larger centres where medical personnel and hospital facilities are available. Various postgraduate training courses (duration 6 months to 2 years) help prepare outpost nurses by increasing skills in relevant areas such as pharmacology, psychiatry, community health, leadership and management, cultural differences, communications, and also physical assessment and case management in obstetrics/gynaecology, pediatrics, ophthalmology, and ear, nose, throat, and chest conditions. These short-term courses are intended as an interim measure until more fundamental changes in nursing education bring about general improvement in community health care delivery.

1208 Kergin, D., Dauphinee, W.D., Hould, F., Labelle, H., Laurin, P., Wieler, A., Wiley, J., Wylie, K.O. *Report of the Committee on Clinical Training of Nurses for Medical Services in the North.* Ottawa, Department of National Health and Welfare, Oct 1970. 28p. Engl.

This is the report of a committee established for the purpose of exploring the need for and development of a training programme designed to increase the competence of nurses employed in the isolated nursing stations of northern Canada. After visits to seven northern areas, the committee members were able to consider the environmental problems and disease patterns confronting the nurses. It was estimated that about 50% of cases could be completely managed (i.e., diagnosis and treatment) by the nurse. She could cope with most of the remainder if provided with extra training and the availability of physician consultation. Fewer than 1% of cases would be completely beyond her capabilities. The overall objective of a training programme would be to increase the skills of the nurse in physical assessment and case management, especially her ability to accurately describe signs and symptoms and to cope with emergency procedures. The report contains a list of the specific diagnostic and therapeutic skills that the nurse should possess at the end of a training course composed of 2-3 months on-site orientation, and 3-4 months formal training. Other recommendations concerning entry requirements, selection of candidates, training institutions, etc. are also noted. Appendices to the report describe population statistics for the areas visited and the incidence and severity of diseases treated at one of them.

1209 Leahy, K.M., Cobb, M.M., Jones, M.C. *Community health nursing.* New York, McGraw-Hill, 1972. 358p. Engl.

This book presents some fundamentals of public health nursing for basic degree students and also illustrates, by means of case situations and case records, the diverse problems and activities of the public health nurse. The first part of the book contains chapters devoted to the concepts of community health nursing practice; relationship skills; community characteristics and health practices; the family; the home visit; communication (the learning and teaching processes); family nutrition; selected concerns (e.g., alcoholism); statistics; and the history, trends, and philosophy of community health nursing. The second part presents some brief descriptions of actual situations and case records of work with individual patients and families.

1210 Makhwade, K.M. *Nursing education in Botswana: its role in the future development of nursing services.* International Journal of Nursing Studies (Elmsford, N.Y.), 7(1-2), 1970, 19-30,-99-113. Engl.

In a dissertation submitted as course work toward a certificate of nursing studies, the author points out some factors to consider in planning nursing services for Botswana, postulates objectives of nursing services, discusses the types of nursing services and their staffing needs, and finally, makes some suggestions regarding nursing education. Nursing education should be comprehensive, combining the general nurse, midwife, and public health nurse curricula to produce an "all purpose nurse." Standards of education and admission to schools of nursing should be raised; it has been found that this upgrading generally increases, rather than decreases, the number of applicants. Skills that help the nurse advise, teach, give support to doctors and patients, and understand human behaviour in relation to disease should be developed through a problem-solving approach and the inclusion of the social sciences in the curriculum. Nurses should be prepared to communicate effectively to take an active part in health education. Once graduated, in-service courses should be made available to nurses at all levels. Finally, to offset nursing shortages, auxiliaries should be employed to relieve nurses for more skilled work.

1211 Malay-Aragon, L. *Background to the proposal of a two-year nursing assistant course.* Philippine Journal of Nursing (Manila), 42(1), Jan-Mar 1973, 17-20. Engl.

The reasons behind the proposal to restructure nursing education in the Philippines are explained. At present, registered nurses qualify via a 4-year hospital-based diploma course, or through a 5-year programme leading to the degree of B.Sc. Nursing (BSN). Not only is this time-consuming, expensive, and unable to satisfy the demand for extra nursing staff, but it produces a highly qualified nurse who is tempted to leave the Philippines and practice in the USA. The proposal is, therefore, to replace the existing system with two levels of nurses: the professional and the assistant. The professional nurse, a graduate of a reduced 4-year BSN programme, would be a fully qualified, competent nurse capable of clinical, educational, and administrative duties. The assistant nurse would be the product of a task-oriented 2-year training course and would assist the professional nurse. The author believes that such a system, by avoiding expensive overtraining, would use available resources more efficiently.

1212 Obsequio, E.T. *Rural health: its implications on nursing education.* Newsette (Manila), 8(2), Apr-Jun 1968, 15-22. Engl.

Of the Filipino population, 75-85% live in rural areas. On the premise that rural health is the key to rural development, a Filipino nurse educator examines the particular needs of this population in order to suggest changes in the nursing curriculum. Before altering a curriculum, the health educator must be aware of the following: what problems are particular to rural communities; what has been done so far to remedy these problems, and with what resources; what technical and cultural factors obstruct health efforts; what are the emergencies unique to rural communities that are likely to be encountered; and what special skills are required of the nurse in these areas. The nursing curriculum should foster a community-oriented attitude among the students; this means more instruction on communicable diseases, on conducting community surveys, and on

analyzing statistical data to determine their implication for health problems and the quality of existing services. An integration of behavioural sciences in all clinical nursing areas is strongly advocated, since an understanding of a patient's behaviour within the cultural context is essential in motivating him to accept new health-related concepts and behaviour. Nurses should continue their education through seminars and in-service programmes; a creative, innovative spirit among nurses should be encouraged. The examples cited provide an insight into the mentality and social customs surrounding illness in the Philippines.

1213 **Saavedra, L.L.** *Informe: cursos y seminarios sobre educacion sexual para enfermeras en Cochabamba, Santa Cruz, y Oruro. (Courses and seminars on sex education given to trained nurses in Cochabamba, Santa Cruz, and Oruro).* La Paz, Centro Nacional de Familia, 1972. 113p. Span.

Several hundred professional nurses have attended this series of lectures and seminars begun in 1971 under the sponsorship of the Bolivian Ministry of Public Health. The series is conducted by a demographer in cooperation with a team of physicians. This report is a compilation of the different lectures on sexual education and family planning given by prominent field professionals. Topics covered include: abortion in Bolivia and in other countries; family planning; birth control methods; sexual education; the nurse's role in sexual education; and social considerations on induced abortion. Each author concludes that sexual education and family planning are valuable as short-term means of improving living standards, particularly those of large families. They strongly recommend that a national education campaign be mounted by the appropriate governmental departments toward this end.

1214 **Sabas, L.E.** *School nursing services.* Philippine Journal of Nursing (Manila), 36, Sep-Oct 1967, 265-270. Engl.

The duties and skills required of public health nurses working in schools in the Philippines are described under the following headings: (1) healthful school living, (2) health instruction, (3) health services, and (4) school-community coordinated health work. The first involves ensuring that the school adheres to certain standards of hygiene and safety and that health habits, attitudes, and practices are promoted therein. The second may involve teaching and will certainly involve the planning and organizing of the total school health instruction programme, handling seminars and in-service training for teachers, and advising teachers on what educational aids, textbooks, and health materials are available to them. The third involves organizing and managing the school health services centre and exploiting the opportunity it presents for individual instruction. The fourth involves going beyond the classroom into the community to obtain a better understanding of child health problems through home visits and involvement with community groups.

1215 **Sullesta, E.** *Rural needs and problems.* Newsette (Manila), 8(2), Apr-Jun 1968, 8-10. Engl.

The role of the nurse as a promoter of comprehensive health and an agent of change in the rural community is discussed. To fulfill this role, the nurse must be aware of the economic, cultural, sociological, technological, and ecological patterns that determine the applicability of health practices to a community. In addition, she must possess understanding in her approach to traditional beliefs that obstruct new practices and tact in her attempt to reeducate the people. To illustrate why some projects fail and how some traditional barriers to change can be surmounted or circumvented, two examples are cited (viz., introduction of eggs into the diet of an African community, and latrines into a rural Indian village). Finally, the wisdom of employing indigenous workers to take on some of the nurse's activities, thus leaving her more time for teaching and nursing, is pointed out.

1216 **UNICEF, New York,** *Guide lists: "Jasmin" and "Katrina".* New York, UNICEF, Oct 1955. 1v.(various pagings). UNICEF/72-154 24/OSU-855. Engl.

"Jasmin" and "Katrina" are guide lists of proposed teaching aids and equipment for a nursing school and a midwifery school respectively. They have been compiled by the United Nations Children's Fund (UNICEF), and each comprises four parts: visual teaching aids, textbooks and references, demonstration room equipment, and supplementary ward equipment for a hospital training programme. Prices for all items are included.

IV.2.2 Nonprofessional

See also: 1063, 1137, 1163, 1184, 1201, 1267, 1273, 1283, 1285, 1290

1217 **Block, D.** *Role change of public health nurses working with indigenous aides.* Public Health Reports (Washington, D.C.), 83(10), Oct 1968, 811-818. Engl. 26 refs.

A county health department in California has introduced indigenous aides into its public health nursing programmes, and this paper explores the attitudes of 10 public health nurses toward the aides. Their feelings about the function of the aides and about their own changing roles were probed. Most nurses reported that their aides performed the nonprofessional, "nontraditional" (e.g., surveys, interpretation), and subprofessional tasks. Tasks involving health teaching, however, were infrequently delegated to the aides, and few nurses seemed committed to relinquishing career-type tasks. Almost all nurses saw their role changing from one with an emphasis on patient contact to one of supervision and teaching. Reaction was unfavourable –

they had enjoyed patient contact, they felt that supervising an aide was time-consuming, and they were unhappy with the clerical work involved. Nurses reported some difficulty in finding enough work for the aides, possibly because they were uncomfortable about the reallocation of functions. Generally, their feelings about this new programme were mixed, and they saw a need for more careful selection, orientation, and training of indigenous workers.

1218 Lacy, K., Buchanan, B. *Observations on the role of the nursing auxiliary in the medical services of Uganda.* Source unknown, n.d. 5p. Engl.
Unpublished document.

In 1971, two sociology undergraduates observed the status and in-service instruction facilities of nursing auxiliaries in 14 general hospitals in Uganda. Their survey revealed that the average hospital had 8 medical and 56 nursing staff, 116 beds, and could accommodate a maximum of 143 patients per night. Auxiliaries constituted 60.5% of all nursing staff and, therefore, were delegated responsibilities beyond their basic domestic work; duties often included giving intramuscular injections; handling drugs; assisting in the operating theatre, laboratory, X-ray department, and outpatient clinics; etc. Training programmes varied among hospitals, but most were formal with lectures and practical demonstrations; the ward staff determined content to suit the pressing local circumstances. The authors have made a number of suggestions to help ease the chronic staff shortage, including development of a standardized national syllabus in the form of a textbook or manual that would provide senior staff with more time for other duties. An organized career structure and a certificate or some other form of recognition for successful candidates would help motivate auxiliaries, especially if there were opportunities for future promotion into the enrolled nurse category.

1219 Lake, J. *Training nurses in Brazil.* Saving Health (London), 12(1), Mar 1973, 13-15. Engl.

This brief account of the author's 14 years experience in the training of nurses in two Evangelical hospitals in Brazil emphasizes the desperate shortage of trained nurses (SRNs) there. Many hospitals are staffed only by a few auxiliary nurses and untrained "attendants." Notable exceptions are the Evangelical hospitals, which are both well equipped and staffed. To ease overall staffing shortages, both hospitals operate a school to train SRNs and auxiliary nurses.

IV.3 Primary family planning and midwifery care

IV.3.1 Professional

See also: 0753, 0962, 1152, 1164, 1172, 1200, 1213, 1216, 1244, 1279, 1294, 1295, 1296, 1297, 1298, 1299, 1301, 1306, 1392

1220 Bannerman, R.H. *Education and training of health personnel for family planning.* Accra, University of Ghana, Balme Library, 1971. 10p. Engl.
Unpublished document.
African Population Conference, Accra, 9-18 Dec 1971.

For a family planning programme to be effective, all members of the health team must be involved to some degree; yet the author notes that the present generation of health personnel (including educators and trainers) has had little or no basic instruction in family planning. With particular reference to Africa, he offers suggestions as to what should be taught, by whom, and how, where, and when the training should be undertaken. These suggestions include new methods of teaching (programmed instruction, group methods, simulation, use of audiovisual aids); the use of short-term training programmes, in-service training, and refresher courses; the deployment of a multidisciplinary team of educators; etc. Two additional aspects of training are also stressed: the need for continuous evaluation of the training programme and further research into more effective ways of training the different members of the health team.

1221 China R, National Health Administration. *Report on family planning workshop for collegiate level nursing and midwifery school teachers.* Taipei, National Health Administration, 24 Jan-5 Feb 1972. 38p. Engl.

This workshop aimed at giving its participants, i.e., nursing and midwifery teachers from the Republic of China (Taiwan), an understanding of the following topics: the national policy and family planning programme; the place of family planning in the nursing and midwifery curricula; the laws, regulations, and resources related to family planning; and how to set up a curriculum and teaching plan for family planning. The workshop provided an opportunity for the participants to exchange ideas and information on the current concept of the dynamics of population change, human reproduction, and family planning. The workshop curriculum, activities summary, evaluation (plus questionnaires used in the evaluation), the final draft of a teaching plan for family planning, and list of reference materials (English and Chinese) are included.

1222 Costa Rica, Ministry of Public Health. *Reglamento para parteras empiricas de Costa Rica. (Regulations for traditional birth attendants in Costa Rica).* San Jose, Ministry of Public Health, 1966. 10p. Span.

These regulations governing the practice of midwifery are contained in a small booklet published by the Department of Maternal and Child Care of the Ministry of Public Health of Costa Rica. The traditional birth attendant is described as a member of the rural community authorized to perform normal deliveries following the completion of a training course at the local health unit. The booklet sets down basic personal requirements, such as age, state of health, literacy, and moral character, of the prospective midwife. It describes which case should be attended by the midwife and which should be referred to a doctor or qualified nurse. Instructions concerning cleanliness, medicines, and child care are given and a list of equipment is provided. The final chapters deal with the responsibility of the nurse for the supervision of the traditional birth attendant, and the health unit for the overall supervision of the entire programme.

1223 **Dwivadi, K.N., Rai, P.H.** *Training of traditional birth attendants: a broader approach is needed.* International Journal of Health Education (Geneva), 14(1), 1970, 29-33. Engl.

A programme to train traditional Indian birth attendants (dais) in the procedures of aseptic midwifery failed because neither the community nor the dais understood or fully appreciated the value of these practices. The Ledhupur Rural Health Centre project, therefore, introduced health education along with the training programme. Traditional practices were taken into consideration: harmless ones retained or modified and harmful ones eliminated. The dais were made aware of the importance of their role and encouraged to develop pride in their work. Later, mothers who had given birth since the introduction of the programme were interviewed to discover their attitudes toward the new practices and the prospects of improving the dais' wages. It was concluded that the security and social approval surrounding traditional functions must be taken into consideration in introducing innovations, in order that newly trained workers do not become alienated from their community.

1224 **International Federation of Gynaecology and Obstetrics, Geneva. International Confederation of Midwives, London.** *Recommendations made at Central American Working Party on "midwifery training and practice," San Jose, Costa Rica, 13-21 Sep 1973.* London, International Confederation of Midwives, 1973. 31p. Engl.

This list of recommendations was presented by a working party of nurse-midwives, midwives, and doctors from Central America to their governments, professional associations, and international bodies. The recommendations concern a definition of the title, function, and levels of midwifery personnel; a delineation of the duties of the midwife and the auxiliary midwife, according to the functions and degree of responsibility of each; the establishment of a committee to take charge of the supervision and improvement of the practice; the establishment of in-service refresher courses sponsored by the health institutions and professional organizations for all categories of midwifery personnel; and an admission requirement of a nursing diploma for all midwifery candidates. Finally, short-, medium-, and long-term guidelines for the implementation of these recommendations are outlined.

1225 **Jara, J.B., Hernandez, N.C.** Chile, National Health Service. *Rol especifico de la matrona en las acciones de medicina integral para el area rural. (Specific functions of the midwife in comprehensive rural health care).* Santiago, National Health Service, Jan 1968. 4p. Span.
Unpublished document.
First Latin American Course for the Upgrading of Midwives, Santiago, Jan 1968.

In Chile, the midwife is considered an indispensable professional member of the rural health team whose responsibility it is to implement comprehensive health coverage in rural areas. The team's functions are divided into four areas – administrative, technical, educational, and formative. Administrative duties of the midwife include planning the activities of the auxiliary health worker in charge of the rural health centre; supervising the care given to the mother and the newborn by the auxiliary health worker; complying with administrative procedures; and maintaining the health centre according to the National Health Service rules and regulations. Technical duties include surveillance of auxiliary workers and assistance in emergency deliveries that may take place during her presence in the rural centre. She is also responsible for the surveillance of mothers using birth control preparations and for referring pathologies to the rural health regional centre. Her formative activities include joining other professionals in training auxiliary health workers, cooperating in the education of community leaders, and contributing to the preparation of in-service educational programmes.

1226 **Karman, H.** *Paramedic abortionist.* Clinical Obstetrics and Gynecology (New York), 15, Jun 1972, 379-387. Engl. 15 refs.

This study, based on 560 pregnancy terminations completed by nontraumatic techniques (in the United States), supports the following hypotheses: (1) certain carefully selected patients can be safely aborted by nonmedical personnel in a supervised clinic setting; (2) most patients do not require cervical dilation and therefore little or no anaesthesia; (3) the problem or risk patient can be identified by paraprofessional personnel and and referred to a physician; (4) serious complications can be virtually eliminated by employing nontraumatic techniques; and (5) motivation and personality factors are more significant in predicting the success of paramedic abortionists than previous training or academic level. It is also probable that patient morale and cooperation can be most easily maximized by female practitioners working with patients of comparable age and background. (Author abstract.)

1227 **Malaysia, Ministry of Public Health.** *Family health project: midwife, nurse, and doctor training*

courses. Kuala Lumpur, Ministry of Public Health, n.d. 6p. Engl.

As part of the family health project, the Ministry of Public Health (Malaysia) has organized three short training courses concerned primarily with family planning and contraception. There are separate 5-day programmes for doctors, nurses, and midwives, and this document lists the three timetables for lectures, films, and demonstrations.

1228 Malaysia, Ministry of Public Health. *Outline of training courses for various categories of medical/health personnel and L.P.K.N. staff*. Kuala Lumpur, Ministry of Public Health, n.d. 5p. Engl.

Information about family planning training courses available in Malaysia for different categories of medical and other personnel has been tabulated. For each course, a list of the type of staff for which it is intended, its objectives, the duration of training, the topics to be covered, and the type of certificate awarded is presented. The courses have been designed for all staff levels (medical officers of health, auxiliary workers, social welfare officers, etc.). Some of the courses are simply for purposes of orientation, while others involve practical experience.

1229 Myles, M.F. *Textbook for midwives*. Edinburgh, Churchill Livingstone, 1971. 827p. Engl.

This comprehensive, detailed textbook on midwifery has become a classic in the field. Although each successive edition has been updated in the light of modern concepts and changes in obstetric practices, the author has borne in mind that 60% of the copies are sold overseas and may be used in areas lacking modern facilities or where the midwife is working in isolation; the chapter on the mechanism of labour takes these facts into consideration. The book is illustrated, and each chapter is followed by questions for review. Suggestions on health education and the teaching of expectant mothers and sample examinations from midwives' boards in the United Kingdom are appended.

1230 National Family Planning Board, Kuala Lumpur. *Integration of family planning with rural health services: training course for medical officer of health, medical and health officer, and medical officer (training)*. Kuala Lumpur, National Family Planning Board, Prime Minister's Department, n.d. 9p. Engl.

This family planning training course offered to medical and health officers in Malaysia has several objectives: to provide them with basic theoretical knowledge and sufficient practical training in all aspects of family planning; to enable them to organize and conduct a family planning service in their own areas; to prepare them for training of paramedical and auxiliary staff; and to provide instructions for the integration of the family planning service with rural health services at the local level. This document is a timetable for a 15-day course composed of lectures, discussions, practical sessions, and films on clinical procedures, management of patients, integration of services, health education, and staff training.

1231 National Family Planning Board, Kuala Lumpur. *Integration of family planning with rural health services: training course for public health sister, public health nurse, sister (training), staff nurse (training)*. Kuala Lumpur, National Family Planning Board, Prime Minister's Department, n.d. 8p. Engl.

The family planning training course for nurses and nursing sisters places special emphasis on practical aspects of the Malaysian national family planning programme. The 18-day course is a combination of lectures, practical sessions, films, and discussions covering the background to family planning, anatomy and physiology, contraceptive methods, integration of services, health education, and instruction of staff and patients. This document is the timetable for the course.

1232 National Family Planning Board, Kuala Lumpur. *Integration of family planning with the rural health services: course for senior supervisory personnel*. Kuala Lumpur, National Family Planning Board, Prime Minister's Department, n.d. 5p. Engl.

The training course for senior supervisory medical and health personnel (e.g., senior medical officer, state health matron) provides information about the Malaysian family planning board programmes and their implementation, including integration of family planning with the rural health services. This document is a timetable for the 4-day course, which comprises lectures and discussions covering general policy, administration, and staff training.

1233 Rao, K.S. *Public health nurse and family planning programme in rural India*. Nursing Journal of India (New Delhi), May 1966, 141-142. Engl.

The government of India is gradually giving higher priority to family planning efforts. Its aim is to integrate family planning with every primary health service offered. Education of the public is fundamental to the success of the programme, since superstition, religious beliefs, ignorance, and illiteracy currently cause people to resist innovation. As a member of the health team, the public health nurse can contribute significantly toward the acceptance of family planning, since he/she is readily accepted in rural areas. During home visits, he/she can provide the appropriate information and advice; through visual aids, he/she can instruct groups. Finally, to further disseminate information, the public health nurse can train auxiliary personnel in family planning education.

1234 Satterthwaite, A.P. National Research Institute of Family Planning, Karachi. *Training and performance of paramedical personnel in the Pakistan Family Planning Programme*. In Population Control: Implications, Trends, and Prospects. Proceedings of the Pakistan International Family Planning Conference, Lahore, Sweden

Pakistan Family Welfare Project, 1969, 305-317. Engl. 28 refs.

Pakistan International Family Planning Conference, Dacca, 28 Jan-4 Feb 1969.

The Pakistan family planning programme selected the IUD as the cheapest and most practical means of contraception, but most women will not permit male doctors to insert IUDs. As female physicians are scarce, paramedical personnel have been trained for the IUD programme. Most of their work is done in part-time rural clinics or in mobile units. Referral of women for IUD insertions is done primarily by the traditional midwives ("dais"). About 600 lady health visitors (MCH workers with 27 months training) have taken an additional course in family planning. To further increase the work force, a specialized new cadre of lady family planning visitors (LFPVs) was introduced. This article provides a complete job description, including duties and responsibilities, together with details of the training programme. More than 500 LFPVs are working competently at the village level, performing 75-80% of all IUD insertions. More recently, additional training for LFPVs in pre- and postnatal care, child health, and nutrition has been introduced so that they can contribute more to general family welfare at the village level.

1235 **Sosanya, R.O.** *Midwifery services in Nigeria.* Nigerian Nurse (Lagos), 4(4), Oct-Dec 1972, 18-21. Engl.

The history, legislation, education, and facilities concerning the practice of midwifery in Nigeria are discussed. The first trained midwives were educated in England and Wales in 1912. The first registered midwives to graduate from a Nigerian Hospital did so in 1927. The Midwives Board of Nigeria was set up in 1931 to supervise the practice. The midwife is prepared to cope with normal pregnancy, labour, and puerperium, even under adverse conditions. In the future, it is hoped that by training more qualified midwives and by providing better transportation facilities, shortages of medical personnel in rural areas will be reduced.

1236 **Turnbull, L.M., Pizurki, H., ed(s).** WHO, Geneva. *Family planning in the education of nurses and midwives.* Geneva, WHO, Public Health Papers No.53, 1973. 50p. Engl.

Family planning is defined as a "way of thinking and living that is adopted voluntarily upon the basis of knowledge, attitudes, and responsible decisions by individual couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country." Health personnel must appreciate this definition as well as the need for, and value of, family planning as a health measure. Their services should include education and counseling about sex, parenthood, family planning, genetics, and marriage; provision of contraceptives; management of infertility; screening for malignant tumours; and adoption programmes. Major concerns in any programme will be case finding, initiation of family planning, and follow-up. In case finding, nurses and midwives must identify those in need, publicize the benefits and available services of family planning, clinically examine those interested, and draw up individual schedules for follow-up care. Therefore, family planning courses must prepare health workers to undertake all these services. The desirability and possible ways of integrating family planning content into nursing and midwifery curricula are discussed.

1237 **WHO, Geneva.** *Education and training for family planning in health services.* Geneva, WHO, Technical Report Series No.508, 1972. 28p. Engl.

This report from a WHO study group deals primarily with the problems of developing and implementing programmes for education and training in family planning. It notes that all health workers should acquire some understanding of family planning in the course of their preparation, and, while the objectives and resources vary in different countries, some principles apply generally and should be considered. These are discussed in the report under the following headings: the role of educational and training institutions, strategies for planning and implementing the education and training programmes, job-related training (including field practice), and evaluation of the effectiveness of the training programme. The general recommendations at the end of the report call for greater involvement in family planning of all health personnel, improved coordination between health manpower training and the objectives of the family planning programme, and recognition by the universities of their vital role in the promotion of, and research into, education and training programmes.

IV.3.2 Nonprofessional

See also: 0738, 0774, 0962, 1137, 1143, 1152, 1163, 1220, 1224, 1228, 1289, 1297, 1299, 1302, 1303, 1304, 1305, 1306, 1318, 1389

1238 **Abbott, V.** *Notes on work in the field of maternal and child health and health worker training at Barpali.* Philadelphia, Pa., American Friends Service Committee, Nov 1955. 10p. Engl.

As part of a 10-year village development project, which encompasses 77 villages in Orissa State (India), local women have been trained as village health workers. Training consisted of a 6-9-month apprenticeship in general health work, midwifery, and routine village visiting, supplemented by classes in simple anatomy, physiology, domiciliary midwifery, asepsis, nutrition, child care, village sanitation, common diseases, immunization, and also reading and writing. On completion of the apprenticeship, the health worker was assigned to a village where she visited women in their homes, attended expectant mothers and babies, treated minor illnesses, taught reading and sewing, and as she became established, set up a small maternal and child health

centre. The project was greatly aided by the type of women who volunteered: the fact that they came from influential families, as well as being intelligent and resourceful, encouraged the villagers to overcome initial prejudices and to accept their services and advice. The paper includes an outline of the prenatal and infant routines prescribed by the project and some clinical notes on disease prevalence and state of nutrition as found in the district.

1239 **Amritmahal, G.R.** International Planned Parenthood Federation, Kuala Lumpur. *Training of family planning workers.* Kuala Lumpur, International Planned Parenthood Federation, South East Asia and Oceania Region, Monograph No.1, 1972. 22p. Engl. 31 refs.

The training of family planning workers has been a matter of concern to the International Planned Parenthood Federation for a number of years. Training should be oriented to the acquisition of specific skills that are related to the job required. An overall national plan is useful in visualizing training objectives and evolving curricula related to job descriptions. A national training centre and some regional training centres should be established. Later, facilities should be extended to peripheral levels. Core faculty of training centres should be multidisciplinary; field work and research should be considered an essential part of their functions. Job descriptions should be tested in the field periodically. Curricula evolved should be constantly evaluated and refined. Evaluation of students' performance in job situations should be a regular activity of the faculty.

1240 **Croley, H.T., Haider, S.Z., Begum, S., Gustafson, H.C.** *Characteristics and utilization of midwives in a selected rural area of East Pakistan.* Demography (Chicago), 3(2), 1966, 578-580. Engl.

This study examined the utilization, characteristics, and practices of dais (village midwives) in a rural area of East Pakistan (now Bangladesh) to assess their possible value as family planning promoters. It revealed the following facts: only 6% of the 632 women interviewed were delivered by dais – the rest were delivered by relatives, neighbours, or themselves; dais are mainly widows and older women with no formal training; they handle three to four deliveries per year, usually for relatives and friends, and at no fixed fee; about one-half of the dais interviewed had a general understanding of the reproductive process but most did not know how to prevent conception; and one-half thought it would be a good idea to participate actively in a family planning programme. The results of the study suggest that although there are dais in East Pakistan who could be used by the government in a family planning programme, in view of the small number of dais, the limited number of deliveries performed by them, their lack of knowledge concerning contraception, and their low status in the community, other village women or men could prove just as, if not more, effective as family planning promoters.

1241 **East Pakistan Research and Evaluation Centre, Dacca. Sweden Pakistan Family Welfare Project, Dacca.** *IUD clinic management: a manual for Thana family planning officers.* Dacca, East Pakistan Family Planning Board, 1967. 69p. Engl.

The Thana family planning officer is responsible for establishing and supervising permanent, part-time, and mobile IUD clinics in East Pakistan (Bangladesh). This manual for the Thana officers emphasizes the importance of maintaining high standards of cleanliness, efficiency, and organization in the clinics. It includes advice on: staffing, publicizing, and designing the clinic; overcoming specific problems that have been encountered in other clinics; deciding when a new clinic is justified; and choosing a good location for a new facility. The appendix includes suggested floor plans and space arrangement, construction details, standard procedures for IUD insertion, and a section on setting up a mobile clinic.

1242 **Fendall, N.R.** *Family planning and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 88-106. Engl., Fren. 19 refs.
See also entry 1137.

The number of existing medical and paramedical cadres in developing countries cannot fill the need for family planning personnel; therefore, the case is presented for an auxiliary whose primary objective is family planning, but who can relate to health services as a whole. Trained in clinical, educational, and managerial skills, this auxiliary would be employed full time. Her (his) duties in the clinic would include history taking; examination; selection, prescription, and fitting of contraceptives; record keeping; marriage and infertility counseling; etc. Educational and community activities would include home visiting, follow-up, treating complications, reassuring and supporting the acceptor, etc. The required depth of knowledge and vocational skills could be achieved by a person of middle level education. Family planning auxiliary utilization and training in Barbados, Nigeria, USA, Kenya, Turkey, Pakistan, Iran, China, and Morocco are briefly mentioned, and examples of curricula used in East Pakistan (Bangladesh), Russia, and a suggested curriculum are appended.

1243 **Gardezi, H.N., Inayatullah, A.** West Pakistan Family Planning Association, Lahore. *Dai study: the dai-midwife, a local functionary, and her role in family planning.* Lahore, West Pakistan Family Planning Association, 1969. 106p. Engl.
See also entry 1248.

In this study, the role of the "dai" (indigenous midwife in West Pakistan) as a promoter of family planning in an experimental programme is examined. The attempt to involve dais in this work is an effort to motivate local people to accept unfamiliar concepts via familiar personnel. The background, age, marital status, and other variables of dais involved in the study are recorded.

The dais' attitude to, and knowledge of, family planning were tested before and after their exposure to lectures and demonstrations on the subject. One of the limitations to the success of the programme was that, although the cooperation and involvement of the dai are essential to the implementation of the programme, the dai is not an influential person in the community; other groups of workers might be more successful in influencing couples to accept family planning. Study findings are presented in tabular form and the interview schedules used in the study are appended.

1244 Ghosh, B.N. *Exploratory study of midwifery practice of the local indigenous dais in Pondicherry and utilisation of domiciliary midwifery services of a health centre by a semi-urban slum community.* Indian Journal of Public Health (Calcutta), 12(3), Jul 1968, 159-164. Engl.
See also entry 1383.

This investigation compares the utilization of three midwifery services: domiciliary delivery by indigenous midwives (barber-women) or by health centre midwives, and hospital delivery. One hundred mothers from the urban community that is served by Pondicherry health centre (India) were surveyed. Although 95% knew of the centre's domiciliary delivery service, only 20% actually used it; 55% of deliveries took place in hospital, and the remaining 25% were performed by barber-women. Preferences were determined by a mixture of practical necessity (e.g., nobody at home to look after the mother during labour) and superstition (e.g., traditional methods for cutting and dressing the cord). The techniques employed by the barber-women during and after labour, including many that are potentially harmful, are described. It seems probable that the numbers of urban mothers who prefer hospital deliveries will increase and consequently, the training of health centre midwives should be reoriented to emphasize health education, family planning, immunization, and pre- and postnatal services.

1245 Hartfield, V.J. *Role of paramedical personnel in family planning programmes: with particular reference to intra-uterine devices.* West African Medical Journal (Ibadan), 17(6), Dec 1968, 225-226. Engl.

The intrauterine device has proved to be a suitable form of birth control among the economically and educationally underprivileged. Unfortunately, insertion programmes in developing countries are often held up due to physician shortages. To counteract this problem, paramedical personnel in countries such as India, Pakistan, Korea, and Barbados have been trained to perform insertions, often without direct medical supervision. In a programme now under way at the Wesley Guild Hospital, Ilesha, Nigeria, nurses are being trained under the supervision of a gynaecologist. The routine of insertion is outlined. The limited data so far available indicate no significant alteration in the incidence of complications arising from insertion by paramedics as opposed to physicians; acceptance rates, however, are considerably increased and removal rates slightly lowered when insertions are performed by paramedical personnel.

1246 India, Ministry of Health and Family Planning. *Involvement of vaccinator in family planning programme in an urban area: a case illustration.* New Delhi, Central Health Education Bureau, Directorate General of Health Services, Ministry of Health and Family Planning, Nov 1974. 3p. Engl.
Unpublished document.

The personality and credibility of the family planning promoter may influence contraception acceptance; for example, in India, a vaccinator with two (planned) children of his own made use of the opportunities afforded by his position to speak to young couples concerning the merits of small families and to refer them to the family planning clinic. As a result of this personal rapport with interested couples and his own enthusiasm for family planning, he was asked by the Central Health Education Bureau to become "depot-holder" or supplier of contraceptives, a responsibility that he accepted and effectively fulfilled. From this experience, it was concluded that vaccinators could provide valuable assistance in family planning work, provided that they themselves have faith in the programme and practice family planning.

1247 Kakar, D.N. *Role of the indigenous midwife in family planning programme.* Nursing Journal of India (New Delhi), 63(1), Jan 1972, 14-26. Engl.

In rural Punjab (India), the indigenous midwife is far more acceptable to the village people than is the trained midwife from the health centre. According to the author, this acceptance is due to the range of services provided by the indigenous midwife and their relevance to the traditional culture. If a family planning programme is to be introduced, the valuable role of the indigenous midwife must not, therefore, be ignored. The author recommends that her social position in the community be recognized and strengthened by involving her in health centre activities. With further training she could carry out safer deliveries, provide family planning services, and refer complicated cases to the health centre staff. In this way she would help overcome the lack of community participation in health programmes.

1248 Khan, A.M. Family Planning Association of Bangladesh, Dacca. *Dai study: the dai-midwife, a local functionary, and her role in family planning.* Dacca, Family Planning Association of Pakistan, Oct 1971. 90p. Engl. 8 refs.
See also entry 1243.

In 1967, an extensive survey was conducted in Bangladesh to determine the possibilities of utilizing local midwives or "dais" in family planning work. Earlier data were contradictory, mainly due to the difficulty of distinguishing the dai from other women attendants (i.e., relatives or neighbours). In this study, midwifery

is assumed to be a marginal vocation, generally performed by women of extreme poverty, social handicaps, or low caste. Eighty-three midwives within a defined geographic area were sought out and interviewed. From them, a group of 63 were selected for a training course (17 sessions, 1 1/2 hours each). The women were interviewed immediately after training and again 6-8 months later to see if there had been a sustained change in their knowledge or practice. Data on dai personal characteristics, socioeconomic background, vocational knowledge and skills, and knowledge, opinions, and practices concerning family planning are presented in tabular form. Study findings included the following: midwives had no more knowledge about midwifery than did the average woman; they had little knowledge of family planning but were concerned about the rising population; they were eager to learn about family planning, and matters of concern in their vocation, and to put into practice their newly acquired knowledge. Six months later, of the 63 women only six were still working in family planning, but most had retained and put into practice what they had learned about delivery. It was concluded that dais might better be utilized in a programme of maternal and child health. Interviewing schedules (questionnaires) are appended.

1249 **Pan American Health Organization, Washington, D.C.** *Guia de orientacion y supervision de parteras empiricas: para enfermeras y obstetrices responsables del programa. (Guide for nurses and obstetric personnel in the orientation and supervision of empirical midwives).* Washington, D.C., Pan American Health Organization, 1969. 35p. Span.

The concentration of professional medical personnel in the major urban centres of Latin America has produced an imbalance between supply and demand of medical services. Admitting that professional medical personnel will not be available to rural areas for many years to come, the Pan American Health Organization has begun to plan accordingly in the field of obstetrics. It is attempting to standardize and control the practice of the indigenous empirical midwife. Admittedly, this will not be an easy task, as midwives may view the programme as a threat to their established position in the community. Gathering basic information about their number and activities and convincing them of the need for a common meeting place (health post) where their respective practices will be revised and upgraded will require the utmost tact; losing their confidence and being rejected will result in failure of the programme. This guide is intended for personnel who are responsible for orientation and supervision of the rural empirical midwife.

1250 **Rogers, E.M., Solomon, D.S.** *Traditional midwives and family planning in Asia.* Studies in Family Planning (New York), 6(5), May 1975, 126-133. Engl. 61 refs.

The objectives of this article are to (1) review the contribution of traditional midwives to family planning communication in several Asian countries (India, Pakistan, Indonesia, Malaysia, the Philippines, and Thailand); (2) organize knowledge, gathered from various studies, into general guidelines for the most effective use of traditional midwives in family planning programmes; and (3) present hypotheses for future research. In certain countries where pilot projects have tested the potential performance of traditional midwives in family planning programmes, results have been encouraging. In other nations, more research is needed to determine the contribution traditional midwives can make to the family planning programme. (Journal abstract.)

IV.4 Primary dental care

IV.4.1 Professional

See also: 1015

IV.4.2 Nonprofessional

See also: 0738, 0753, 1015, 1137, 1163, 1164

1251 **Durocher, R.T.** *Adiestramiento del personal auxiliar en odontologia. (Training of auxiliary personnel in dentistry).* Temas Odontologicos (Antioquia, Colombia), 9(88), Apr-Jun 1967, 527-542. Span. 22 refs.

The author suggests that in Latin America the professional dentist should be trained to perform more technically complex tasks, leaving routine ones to auxiliary dental personnel. The experiences of the USA, New Zealand, Malaysia, England, and Canada have confirmed that with adequate training, auxiliaries can be efficiently deployed. The author also believes that these auxiliaries should be given professional status as members of the dental health unit, instead of being regarded as outside the profession's mainstream. He then gives some examples of the ways in which a training course could be modified and expanded to enable the auxiliary to perform more functions.

1252 **Fendall, N.R.** *Dental care and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 158-170. Engl., Fren.

See also entry 1137.

A dental programme is suggested for developing countries where dental disease is widespread. The first phase is to train, overseas, a core of "socially minded" dentists who can survey the extent of dental problems and plan for a comprehensive service. The second phase is

to increase the availability of treatment by training existing auxiliary health workers in dental first aid (treatment of oral infection, teeth extractions, abscess incisions). The third phase is to improve the quality of such a service by introducing a specific cadre of dental auxiliaries. A country may opt to train various single-skill auxiliaries, or it may train two cadres of multipurpose auxiliaries – one to treat children and one to treat adults. Children require preventive care, i.e., cleaning and scaling, application of fluoride, treatment of oral infections, cavity repair, and oral hygiene instruction, and adults primarily need extractions and simple dental prosthetics. The approach that utilizes multipurpose auxiliaries is advocated because it would permit a rural dental service to be supervised by a central staff some distance away. The curriculum for the dental hygiene course in Thailand is appended.

1253 **Gillespie, G.M.** *Chapter III: training and utilization of dental auxiliaries in Jamaica.* In Utilizing New Personnel for Extending Health Care Services, Washington, D.C., Pan American Health Organization, 1973, 37-47. PAHO/HR/CPP/D/15. Engl.
Pan American Conference on Health Manpower Planning, Ottawa, 10-14 Sep 1973.

That dental auxiliaries can provide a valuable service has been well demonstrated by the success of the New Zealand training programme initiated in 1921. A new school for dental nurse auxiliaries and dental assistants in Jamaica, where the dentist-to-population ratio approaches 1:50 000, has reaffirmed this. The new service was established with the assistance of the national government, which provided the site, architects, and the funds for the school; PAHO provided technical assistance and trained personnel; and UNICEF provided the dental equipment. This paper describes the development of the project and its emphasis on school dental services. It also details class size, entrance requirements, procurement of staff, and steps taken to ensure smooth integration into the existing system (e.g., legislation, employment opportunities). Two appendices contain an outline syllabus for the training of dental surgery assistants and the curriculum and examination requirements of the 2-year course for school dental nurses. The training school produces high calibre personnel and confirms the feasibility of such a scheme in a developing country.

1254 **Halestrap, D.J.** *Simple dental care for rural hospitals.* Saving Health (London), 9(2), Jun 1970, 33-35. Engl.

This scheme for training auxiliary dental workers in Uganda, Rwanda, and Burundi was begun as a missionary project but later was proposed to the Government of Uganda, who then implemented it in some of its own hospitals. Twenty-seven "bush" hospitals in the three countries were visited. It was observed that the dentist: population ratio in Uganda was 1:500 000, and in Rwanda and Burundi, 1:1 500 000. Most people relied on the local toothdrawer or bush hospital for dental care. Paramedicals were able to extract teeth but lacked instruments for and knowledge of local anaesthesia. Gum disorders were prevalent among the Africans, but paramedicals seemed to know little about these conditions. As a result of the investigation, three teaching safaris were organized in which a dentist went to the bush hospitals to teach basic techniques to those already carrying out dental work and to supply them with a basic set of instruments. Each trainee was given an illustrated booklet of what he had been taught to refresh his memory.

1255 **Myers, S.E.** WHO, Geneva. *Operating dental auxiliaries.* WHO Chronicle (Geneva), 26(11), Nov 1972, 511-515. Engl.

In over 40 countries of the world, 35 000 operating dental auxiliaries are now functioning, under direct or indirect supervision of dentists, in the areas of prevention, treatment, and dental health education. More than 270 training programmes for dental auxiliaries are currently in operation. This report discusses the range of activities being performed by dental auxiliaries and some of the more recently developed training programmes. These include: the establishment in 1972 of a School for Public Health Dental Assistants in Uganda; two dental auxiliary training programmes in Senegal; a 2-year dental nurse training programme in Jamaica, established in 1970; and the continuation of a 2-year dental therapist training programme at the Port Moresby Dental College in Papua New Guinea. The year of introduction of operating dental auxiliaries, the number of training centres, and the estimated number of students have been documented according to country in two tables.

1256 **Schamschula, R.G., Barmes, D.E., Veroli, P.** *Dental education in Papua New Guinea. Part III: dental technician and orderly courses; auxiliary training for periodontal disease prevention.* Australian Dental Journal (Sydney), 13, Jun 1968, 237-240. Engl.

This article describes the aims of the dental service in Papua New Guinea, the factors that led to the introduction of local auxiliary dental workers, and the objectives and content of the training courses for technicians and orderlies. The major emphasis in dental care has been placed on preventive measures: incremental school dental service, fluoridation of water supplies, and dental health education and oral hygiene campaigns. Restorative and prosthetic services are limited; consequently there is little scope for a fully qualified dental technician. The urgent need for additional dental personnel to assist the insufficient number of professional dentists, however, has been met by modified training courses (6 months for dental orderlies, 3 years for dental technicians) for dental auxiliaries. These auxiliaries will administer simple preventive and curative procedures, provide assistance to dental officers and nurses, give oral hygiene instruction, and help with simple clerical duties. The aim of this programme is to provide each dental officer with adequately trained auxiliary staff; the team concept is strengthened and the whole plan is integrated by refresher training of

dental nurse staff and undergraduate training of dental officers in the use of these auxiliaries.

IV.5 Primary laboratory care

See also: 0738, 0753, 0976, 0977, 1063, 1137, 1164

1257 **Ali, M.Y.** Papua New Guinea, Department of Public Health. *Laboratory personnel.* In Bell, C.O., ed., Diseases and Health Services of Papua New Guinea, Konedobu, Papua New Guinea, Department of Public Health, 1973, 620. Engl.
See also entry 823.

This short report briefly reviews the training courses for different types of laboratory personnel in Papua New Guinea. The categories of staff at present are the laboratory specialist, medical technician, and the technical assistant/laboratory aide. (1) Laboratory specialists are medical graduates who have undertaken an additional 2 or 3 years of study in clinical pathology or biochemistry; it is anticipated that four or five of these specialists will be trained within 5 years. (2) The certificate-level medical technician course takes 3 years and its syllabus includes practical experience in haematology, microbiology, biochemistry, and histology; 10 students are expected to graduate each year. It is projected that a new 2-year diploma course in medical technology will also be introduced for certificate holders. (3) Technical assistants and laboratory aides receive no formal tuition but with in-service training are able to run small district hospital laboratories under the supervision of the medical officer. It is anticipated, however, that this category of laboratory personnel will be replaced when a projected 1-year course for laboratory assistants is implemented.

1258 **Fendall, N.R.** *Technology and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 129-141. Engl., Fren.
See also entry 1137.

Modern diagnostic procedures require the physician to rely increasingly on the laboratory investigation. This is especially true in rural areas of tropical countries where the vector-borne, parasitic, and communicable diseases abound. Clinical examination of blood, urine, faeces, and sputum are simple, routine procedures that can be performed by trained auxiliaries with access to limited laboratory facilities and consultative services. A 3-year course that is based on an entry requirement of 7-9 years of schooling and that emphasizes skills rather than theory would be adequate training for the auxiliary. Existing laboratory manpower and training programmes in Guatemala, Jamaica, Senegal, Thailand, Ethiopia, Nigeria, and Kenya are discussed, and a curriculum for a course in clinical laboratory techniques is appended.

1259 **Guatemala, Ministry of Public Health and Social Welfare.** *Programas de los cursos para auxiliares de laboratorio y inspectores de saneamiento. (Course programmes for laboratory auxiliaries and sanitary inspectors).* Guatemala, Ministry of Public Health and Social Welfare, n.d. 14p. Span.
Unpublished document.

This document describes the objectives, content, and some administrative regulations of the sanitation inspector course and the laboratory auxiliary training course in Guatemala. The study programme for laboratory auxiliaries includes lectures on virology, coprology, haematology, blood bank, serology, blood chemistry, and bacteriology. Malariology is discussed at length. All lectures are complemented by practical sessions and visual aids. The purpose of the sanitation inspector course is to upgrade the knowledge and performance of sanitation inspectors. The course includes practical exercises in administrative procedures and an in-depth study, including field experience, of water and sewage treatment and garbage collection and disposal. It also deals with industrial pollution, food control, housing sanitation, and health education. Rules governing admission to the above courses are included.

1260 **Than U, T.** *School of para-medical sciences.* Forward (Rangoon), 10(21), 15 Jun 1972, 12-16. Engl.

The Burma School of Paramedical Sciences, founded in 1964, provides 2-year diploma courses in medical technology, radiography, physiotherapy, and pharmacy for students who have already attained a high level of education (e.g., 2 years at medical school). This article briefly describes some of the activities of the different departments as seen by a visiting lay person.

1261 **Zaror, L.** Universidad Austral de Chile, Facultad de Medicina, Escuela de Tecnologia Medica, Valdivia. *Internado rural de estudiantes de tecnologia medica. (Rural internship for medical technology students).* Valdivia, Chile, Southern University of Chile, Faculty of Medicine, 1973. 1v.(unpaged). Span.

In 1968, the School of Medical Technology (Southern University of Chile) began a rural "internship" programme for medical technologists. Previously, all training had been conducted in Santiago and had not properly prepared technologists for rural practice. The internship comprises 10 weeks of study in a rural or city hospital laboratory located in the southern part of Chile. The aim of the programme is to train medical technologists in laboratory techniques that will enable them to quantitatively determine the nature of health problems in the population and also to take these techniques from the centres of knowledge (hospitals, universities, etc.) to rural areas. This document describes the immediate objectives of the programme, development of the course for 1973, and the course syllabus. Several forms used to evaluate the ability of the student are also included.

IV.6 Primary environmental health

See also: 0738, 0948, 1063, 1137, 1152, 1193, 1259

1262 **Fendall, N.R.** *Environmental health and the auxiliary.* In Fendall, N.R., Auxiliaries in Health Care, Baltimore, Md., Johns Hopkins Press, 1972, 107-128. Engl., Fren.
See also entry 1137.

The "filth diseases" that plague rural populations in developing countries can be controlled through the application of simple measures at the village level. The environmentalist should concentrate on improving personal hygiene and living conditions, controlling zoonoses and vector-borne diseases, and extending public health activities into commerce, especially the manufacture and retailing of food. Education, training, and means of employing both professional and auxiliary cadres of environmentalist in Senegal, Thailand, Guatemala, Jamaica, West Indies, and other developing countries are examined. The author concludes that a realistic approach to the improvement of environmental health can be made using a three-tier system comprising a level of degree-holding sanitary engineers, who would provide leadership, diploma-holding district supervisors, and junior health workers at the village level. He comments that since the needs in rural areas are relatively unsophisticated, generalist rather than specialist training should be given at all levels, although a broad division into environmental sanitarian and communicable disease officer might be desirable.

1263 **India, Ministry of Health and Family Planning.** *Syllabus and curriculum for sanitary inspector's course.* New Delhi, Directorate General of Health Services, Ministry of Health and Family Planning, n.d. 18p. Engl.
Unpublished document.

This detailed training programme for sanitary inspectors in India describes the qualifications and selection of candidates, a full job description, the suggested examination schedule, and the staffing requirements of the training centre. The detailed syllabus is broken down into the different subject groups, the objectives of each part of the course, and the specific topics to be covered.

1264 **Kisembo, J.M.** *Rural health educator.* AFYA (Nairobi), 7(2), Feb 1973, 25-28. Engl.

In assessing a rural health educator's work, the obstacles that impede his progress must be considered. For instance: can the educator express himself clearly and directly in the local language or must he refer to a translator? Must customs and taboos be modified to secure an improvement in the community's standard of health? And, do other aspects, such as geographical location, transportation, communications, and accessibility constitute problems for him? Although the answers to these questions will affect the speed at which the rural health educator will progress, his eventual success will depend on certain personal characteristics: he must be friendly and approachable, sympathetic and tactful, and must be willing to become directly involved in the life of the community. He must also be quick to learn and to pass on new techniques and, of particular importance, he must be a good organizer, capable of planning ahead. Finally, because changes must be introduced into the community gradually, he should possess a sense of hopeful patience.

IV.7 Teaching aids

IV.7.1 Rural health care

See also: 0934, 0945, 0989, 0999, 1099, 1120, 1166, 1174, 1190, 1191, 1195, 1198, 1259

1265 **Ames, K.G.** USA, Department of Health, Education, and Welfare. *Curriculum guide to public health training for the Indian licensed practical nurse.* Rapid City, S.Dak., PHS Indian Hospital, Jan 1968. 57p. Engl.

This guide outlines a 3-month course that specifically attempts to meet the training needs of practical nurses working in the U.S. Indian Health Service. The guide could be useful in developing countries where auxiliary workers are used and where preventive techniques are integrated with curative services. Suggestions for adapting the guide content to other countries' needs are included. Field practice exercises are considered an important part of the training procedure. The practical nurse in the U.S. Indian Health Service functions as an ancillary worker under the supervision of the professional nursing staff.

1266 **Brazil, Ministry of Health.** *Manual para programa de penetracao rural. (Manual for a rural health programme).* Rio de Janeiro, Ministry of Health, 1974. 148p. Portuguese.

The Brazilian government, recognizing the impossibility of providing its rural areas with resident health professionals, has decided to train large numbers of rural dwellers as auxiliary health workers. This manual covers the objectives, organization, and administration of a training programme for such workers; the recruiting and selection of personnel; and the curriculum. Subjects treated include pregnancy and the treatment of mother and infant after birth; the health of the child at each stage of growth, the motor abilities expected of the child at each stage, and the diseases likely to pose a danger to the child; symptoms of the most commonly encountered diseases; what measures to take for serious disease or injury while awaiting professional help,

etc. Although the programme is primarily aimed at disease prevention, a large chapter is devoted to first aid – the treatment of injuries likely to be encountered in the Brazilian rural environment is graphically illustrated. Finally, the manual contains examples of the forms that the auxiliary worker must fill out for each case he handles.

1267 **Byrne, M., Bennett, F.J.** *Community nursing in developing countries: a manual for the auxiliary public health nurse.* Nairobi, Oxford University Press, 1973. 208p. Engl. 21 refs.

This book for community nurses in developing countries deals only with the subjects necessary for effective home visiting and public health nursing, health education, and the improvement of community health. The authors draw particularly from experience in Uganda, but the material covered should prove useful in most developing countries where the vicious circle of poverty, ignorance, and disease has to be attacked from many sides, and where the majority of workers are auxiliaries with perhaps only 8-9 years of schooling. An extensive specialized medical vocabulary has been avoided, and it is hoped that there are chapters that can be used by other auxiliaries, such as health assistants, medical assistants, enrolled nurses, and even community development workers. (Revised authors' preface.)

1268 **Callan, L.B.** *Health education aide trainee project.* Public Health Reports (Washington, D.C.), 84(5), May 1969, 459-464. Engl.

Indigenous nonprofessionals can sometimes educate the members of a community better than can professional health workers. This principle was used by the American Cancer Society (ACS) in its 2-year "health education aide trainee" project. Through this project, ACS hoped to persuade people to seek earlier diagnosis and treatment of cancer. In California's San Francisco Bay area, the society employed nonprofessionals with ethnic and residential affiliations as aide trainees. Their job description included activities ranging from searching out health information in the communities, through recruiting volunteers, to promoting good relations between ACS and other voluntary agencies. Training courses for the aides were informal, and provision was made for follow-up supervision. The aides regularly submitted progress reports and suggestions for future activities. The health education goals of ACS were served, services reached persons who needed them, and all the aides who had entered the programme returned to school during the 2-year project to further their education.

1269 **Cameron, M., Hofvander, Y.** Protein Advisory Group of the United Nations System, New York. *Manual on feeding infants and young children.* New York, United Nations, 1971. 239p. PAG 1. 14/26. Engl. 53 refs.

The FAO/WHO/UNICEF Protein Advisory Group has examined the nutritional problems of the preschool child, placing special emphasis on homemade weaning foods in developing countries. During breast feeding, the child is reasonably well protected, but the weaning period represents a very precarious time. This manual provides 107 recipes from around the world for low-cost, nutritious weaning foods that can be prepared in the home from locally available staples. In addition, it provides information on the normal growth of children, their nutritional needs, morbidity and mortality, different foods and their nutritional value, and nutrition teaching; there is also a bibliography of 53 references. The manual is intended for medical personnel, medical assistants and students, nutritionists, dietitians, nurses and midwives, home economists, and senior personnel in the field of community development and agriculture. The authors hope that the manual will encourage the preparation of national or local editions, and perhaps a simplified version suitable for the lower-level auxiliary worker.

1270 **Costa Rica, Ministry of Public Health.** *Manual Tecnico No.2: vacunaciones. (Technical Manual No.2: vaccinations).* San Jose, Ministry of Public Health, General Health Division, Rural Health Programme, Aug 1973. 31p. Span.

This vaccination manual is intended to serve as a guide for rural health personnel and as a training aid for auxiliary health workers during in-service refresher courses or formal training. The first part of the manual introduces the concepts of vaccination; this is followed by some general principles, such as storage and transport of vaccines, indications for their use, precautions, and organization of the vaccination programme. Specific instructions and an administration schedule are provided for seven vaccines – diphtheria/tetanus, poliomyelitis, measles, tetanus, diphtheria/pertussis/tetanus, smallpox, and tuberculosis (BCG). Finally, to help evaluate the programme, the manual contains examples of forms suitable for maintaining records of vaccines used, numbers of vaccinations, follow-up, and registration of children.

1271 **Costa Rica, Ministry of Public Health.** *Manual administrativo para el auxiliar de salud rural. (Manual of administrative procedures for the rural health auxiliary).* San Jose, Ministry of Public Health, 1972. 22p. Span.
Unpublished document.

The administrative manual of Costa Rica's auxiliary health worker defines all areas of administration and field work for which he is responsible. It consists of six chapters, dealing with organization and functions of the rural health programme and the responsibilities of the auxiliary health worker; a distinction is made between the worker in malarial and nonmalarial regions. The administrative functions of the auxiliary include: drawing up a working plan, forecasting materials and equipment required, and assuming responsibility for all supplies and equipment under his supervision. The working techniques are described in relation to overall programming for rural health activities and, in particular, the programme for malaria eradication. Personal instructions cover norms of ethical and general behaviour. Cleanliness and personal

appearance are emphasized. Other administrative responsibilities involve: preparing all reports required by the Ministry of Public Health, handling funds, and maintaining whatever means of transportation is put at his disposal.

1272 Ethiopian Nutrition Institute, Communication Centre, Addis Ababa. *Visual aids for childcare and nutrition education.* Addis Ababa, Communications Centre, Ethiopian Nutrition Institute, Nov 1973. 1v.(various pagings). Engl., Amharic.

This catalogue describes 12 visual aid packages on child care and nutrition education. The target audiences for the various educational projects range from illiterate villagers to literate public health workers. It is indicated that the complete "nutrition education packages" will include a learning programme embodied in a manual for fieldworkers; a list of programmed visual aids as illustrated in the catalogue for use in the field; and a textbook (or pictorial handouts) for use by the target group.

1273 Goarnisson, J., Blanc, C. *Guide medical africain. (African medical guide).* Issy-Les-Moulineux, France, Editions Saint-Paul, 1972. 743p. Fren.

This manual has been compiled primarily for use by nurses working in Africa but its usefulness extends to missionaries involved in health care, families in isolated places who might be responsible for first aid, and physicians. The manual deals with those illnesses found most frequently in tropical countries, especially in Africa. Causes, symptoms, and treatment are indicated for each disease. The text is divided into major sections on anatomy-physiology, examination of the patient, medical and surgical techniques, application of bandages, emergency cases, skin diseases, pharmacy, professional ethics, and surgical, medical, and child pathology. Several illustrations and a subject index are included.

1274 Gonzalez, W.V., Saborio, E.Q., Castro, G.C. Costa Rica, Ministry of Public Health. *Manual de procedimientos para el asistente de salud rural. (Procedural manual for the auxiliary health worker).* San Jose, Ministry of Public Health, 1972. 144p. Span.

This manual has been prepared for the auxiliary health worker so that he may provide health care delivery services to Costa Rica's 1 million "ultra-rural" inhabitants presently deprived of minimum health care. It is a reference text to which the auxiliary health worker can refer to verify concepts, symptoms, and procedures that were explained during the training course. The manual is divided into six chapters and one appendix. These cover elementary nursing procedures, home visits, vaccination, laboratory sample selection, general rules of hygiene and isolation, first aid care, maternal and child care, environmental sanitation, and identification of the most common diseases. The appendix covers the use and administration of the pharmaceutical drugs the auxiliary health worker will have at his disposal. The manual emphasizes preventive care for the gradual eradication of certain diseases.

1275 Guatemala, Ministry of Public Health and Social Welfare. *Programa para el curso de promotores de salud rural. (Course programme for rural health promoters).* Guatemala, Ministry of Public Health and Social Welfare, n.d. 10p. Span.

Unpublished document.

The programme for rural health promoters in Guatemala includes six topics, one of introduction and five others. The first explains concepts such as rural health promoter, preventive medicine, and curative medicine; the others deal with general hygiene and means of disinfection, sanitation of the environment, and disease. Each topic is summarily dealt with and is followed by practical demonstrations (whenever possible) and a question period. Visual aid systems are used to ensure better understanding by the students. Since some of the practices advocated by the programme are innovative, the rural health promoter must play a fundamental role in their acceptance by the community. Topic number four deals with disease, its meaning, the most common types, and their symptoms and treatment. The role of the rural health promoter in identifying the degree of severity of the disease is emphasized. Maternal and infant care are discussed, with emphasis on the relationship between the rural health promoter and the midwife. Finally, the general functions of the rural health promoter are detailed. These include: preventive medicine, follow-up, minimal administrative aspects, rules and regulations covering his position, and the relationship between the rural health promoter and the community.

1276 Holmes, A.C. FAO, Rome. *Visual aids in nutrition education: a guide to their preparation and use.* Rome, FAO, 1968. 154p. Engl.

This manual is a practical guide to the selection and preparation of audiovisual aids for use in nutrition education programmes. It assumes that the users will be knowledgeable in the elements of nutrition, the preparation of food, and the particular problems of the target locality. The material is organized under the following headings: teaching with audiovisual aids; two-dimensional aids (leaflets, posters, etc.) as reminders; two-dimensional aids involving active participation (magnetic boards, card games, etc.); three-dimensional aids (real objects, models); stories and plays (including puppets and how to make and operate them); photographs, pictures, and films; mass media; construction and use of equipment (silk-screen printing, stencils, duplicators, etc.); drawing and colouring techniques; lettering techniques; choice, testing, and evaluation of visual aids; and training in the use of visual aids. Many of these procedures are illustrated in a step-by-step manner.

1277 Jelliffe, D.B., ed(s). *Child health in the tropics: a practical handbook for medical and para-medical personnel.* Baltimore, Md., Williams and Wilkins, 1968. 164p. Engl. 16 refs.

The clinical, preventive, and social aspects of child health in the tropics are described. The characteristics of, and obstacles to, normal growth and development from birth to school age are outlined, with emphasis on the importance of proper nutrition and hygiene. Explained, too, are the symptoms, causes, prevention, and treatment of the following conditions: kwashiorkor and nutritional marasmus; diarrheal diseases, parasitism, and anaemia; respiratory tract infections; infections of the nervous system; eye, ear, and skin diseases; and accidents. Chapters on health education, immunization, child health services and clinics, and school health services follow. A dosage guide for pediatric drugs, a weight/age chart, and a suggested schedule of immunization for developing countries are included.

1278 King, M.H., King, F.M., Morley, D.C., Burgess, H.J., Burgess, A.P. *Nutrition for developing countries, with special reference to the maize, cassava, and millet areas of Africa.* Nairobi, Oxford University Press, 1972. 1v.(various pagings). Engl. 11 refs.

This book was written for the maize, millet, and cassava regions of Africa (especially Zambia), but much of it will be applicable elsewhere. It is presented in simple English using a strictly limited vocabulary and basic syntax so that it can readily be incorporated into training programmes for medical assistants, medical students, nurses, midwives, community development workers, schoolteachers, etc. The purpose of the book, according to the authors, is to show the reader how to teach nutrition, how to make a community diagnosis of malnutrition, how to initiate community health action, and how to supervise the growth of children using a weight chart. It covers a range of subjects including normal and abnormal growth, different foods and their values, feeding the family, artificial feeding, food production, helping families to help themselves, and helping the community to help itself. It is liberally punctuated with charts, diagrams, and illustrations; it follows a simple logical format; and at the end of each chapter it suggests a series of projects for the student to reinforce the practical aspects of applied nutrition.

1279 Kotwal, N.S., ed(s). Trained Nurses Association of India, New Delhi. *Public health manual.* New Delhi, The English Book Store, 1971. 488p. Engl.

The *Public Health Manual* is an aid to teachers and students in public health nursing, health visitors training, or midwifery. Its 25 chapters deal comprehensively with public health work in India, including background and administrative aspects (professional ethics, work planning, record writing, community development, etc.) and instructions on day-to-day activities in fields such as family planning, maternal and child health, school health, home visiting, and disease management. There is also a full job description of the public health nurse, a chapter describing the organization and administration of the public health service, and finally a short bibliography for further reading.

1280 Lewis, A.M. *Immediate care of the sick and injured: a course guide.* Wichita, Kan., Kansas Medical Society, 1969. 122p. Engl. 11 refs.

This manual on emergency care is intended as a course guide for use by physicians who may instruct paramedical personnel in the advanced techniques now being introduced in the medical field. The guide, developed in the USA, was compiled from lectures presented by physicians at emergency care courses and from printed sources. The text contains several diagrams and illustrations, plus summary lists of instructions; it is divided into 14 chapters covering topics such as emergency childbirth, transportation of the injured, fractures, poisoning, etc. The appendix contains suggestions for planning a 2-day training course and also lists films, equipment, handouts, and demonstrations that would prove useful for teaching purposes.

1281 Neville, P.J. All Africa Leprosy and Rehabilitation Training Centre, Addis Ababa. *Guide to health education in leprosy.* Wuerzburg, Federal Republic of Germany, Germany Leprosy Relief Association, n.d. 19p. Engl.

Health education plays an important part in the treatment and control of leprosy. The patient must be helped to understand the causes of the disease, what it is doing to him, and his own role in its treatment. Much will depend on his cooperation and understanding, particularly in the presence of anaesthesia, an accompanying symptom of the disease. Visual aids are important in health education, but learning by doing is more so. Education for the leprosy patient should include practical sessions so that, for example, women patients with sensory loss of the hands can be taught to cook. Examples of this kind of teaching through practice are given and illustrated. Subjects discussed include: early signs of leprosy, facts about leprosy; care of the skin, shoes, hands, eyes; general hygiene, first aid treatment of wounds, and care of a plastercast. A sample form for an injury survey is included.

1282 Owen, F.C., Hawkins, A.V. USA, Department of Health, Education, and Welfare. *Curriculum guide to meeting the needs of people: advanced practical nurse training program.* Rapid City, S.Dak., PHS Indian Hospital, Jun 1969. 76p. Engl.

This curriculum was designed for the training of advanced practical nurses to be deployed in U.S. Indian Health Service hospitals. Practical nursing skills and content related to understanding human behaviour are emphasized. This curriculum covers material designed for a 3-month course. It describes the content of a 7-week field training session in an Indian health service hospital. Training is developed according to the health problems peculiar to the patients. The guide includes

lists of references for use with teaching units and describes the actual activities to be carried out in conducting training in various subjects.

1283 **Owen, F.C., Hawkins, A.V.** USA, Department of Health, Education, and Welfare. *Curriculum guide: basic nursing principles for experienced aides - an advanced nurses' aide training program.* Rapid City, S.Dak., PHS Indian Hospital, Jun 1969. 69p. Engl.

This curriculum guide for experienced Indian nurses' aides working in the U.S. Indian Health Service is a companion to the curriculum guide for advanced practical nurses. It was designed to meet the training needs of the staff members of Indian health service hospitals. Practical aspects of the trainees' work are stressed. The curriculum provides for demonstration of skills, followed by practice in hospital wards. Occasionally nurses' aides in training are supervised by advanced nurses' aides. Goals of the curriculum include: imparting scientific knowledge and skills, increasing trainees' understanding of patients, and human relations as they relate to health.

1284 **Rahman, A., Das, B.N.** *Orientation training course at rural health unit and training centre, Singur.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 48-52. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

The Singur Centre was established in India in 1953 for the orientation of health centre personnel: doctors, sanitary inspectors, lady health visitors, midwives, and senior medical administrators. The objectives of the centre were to acquaint personnel with the integrated concept of health, the basic philosophy of community development, the notion of community "self-help," skills in community diagnosis, and the concept of teamwork. Unfortunately, the centre's enrollment has declined steadily over the past two decades. Some of the reasons for its drop in popularity were reported to be that trainees had to travel great distances, resulting in late arrivals, early departures, and general disruption; some trainees required more background information than others, such that lectures bored some but were too advanced for others; some trainees were hampered by a lack of knowledge of the local language; and the shortage of all categories of health worker precluded adequate representation of the health team concept. The author suggests, therefore, that training be decentralized and that state training centres be formed. This centre could then be used as a regional orientation centre to train faculty for state centres, and the state training centres would train not only medical officers, sanitary personnel, nurses, etc., but also basic health workers.

1285 **Rapier, D.K., Koch, M.J., Moran, L.P., Geronsin, J.R., Cady, Jr., E.L.** *Auxiliar de enfermeria. (Auxiliary nurse training manual).* Mexico, D.F., La Prensa Medica Mexicana, 1962. 630p. Span.

This comprehensive Mexican manual covers the theoretical aspects of in-hospital training for auxiliary nurses, including candidate selection, but much of the material could prove useful to rural auxiliary health workers in smaller health centres, dispensaries, and rural hospitals. With the aid of illustrations, it describes care of different parts of the body, medical and surgical procedures, and a wide range of methods regarding the in-hospital handling of patients. One chapter deals with the administration, effects, and antidotes of various drugs.

1286 **Ross, W.F.** All Africa Leprosy and Rehabilitation Training Centre, Addis Ababa. *Essentials of leprosy.* Wuerzburg, Federal Republic of Germany, Germany Leprosy Relief Association, n.d. 20p. Engl.

This handbook was put out by the All Africa Leprosy and Rehabilitation Training Centre (Ethiopia) for medical students and senior leprosy workers. It defines leprosy, its epidemiological characteristics, clinical features, classification, diagnosis, complications, treatment, and means of prevention and correction of deformities. Also discussed are the control of the disease and the social aspects. It is noted that people in most cultures have an exaggerated fear of the disease, which is based primarily on the severe deformities it can produce. It is sometimes perceived as a punishment for sin. Emotional and cultural aspects of the disease are important factors in its treatment, as social problems of patients are frequently severe and require as much attention as the physical aspect.

1287 **Seth, R.K.** *Practical problems encountered by trainees in field situation as observed by the Rural Health Training Centre, Najafgarh, Delhi.* In Report on a Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, WHO, Oct 1972, Part II, 23-25. WHO/SEA/PHA/106. Engl.
Seminar on the Training of Medical Officers in Rural Areas of India, Najafgarh, New Delhi, 23-28 Oct 1972.

The rural health training centre, Najafgarh, India was established to give the members of the health team practical in situ training. Several problems, however, have lessened the effectiveness of the centre's programmes: the cultural gap between student and villager precludes mutual understanding; medical attention has concentrated on the population immediately surrounding the training centre such that this area is no longer representative of the conditions prevailing throughout the country; students have not been properly guided or supervised in carrying out assignments; and the curriculum needs altering in the light of changing expectations and the addition of new paramedical cadres.

1288 University of Khartoum, Department of Paediatrics and Child Health, Khartoum. *Teaching of paediatrics in the Sudan.* Medani, Sudan, Medani Hospital (courtesy Dr. H. El Shazali, Senior Consultant Paediatrician), n.d. 8p. Engl.

Recognizing the need to give potential rural health centre physicians some training in a rural setting, the Department of Paediatrics and Child Health, Faculty of Medicine, University of Khartoum (Sudan) decided to establish a rural health teaching centre. Support from the university, the Ministry of Health, and the World Health Organization was enlisted, and a rural area 30 minutes drive from the Faculty of Medicine was selected. The plan of work is as follows: the area is to be surveyed and basic data collected; anthropometric measurements, such as height, weight, head circumference, etc., are to be taken for all children under five years; and all children in this age category will be clinically examined to determine their health and nutritional status. In return for their cooperation, the people of this area will receive nutrition rehabilitation, health and nutrition education, immunization, family health clinic service, treatment for bilharzia, and improved living conditions. The health centre will be permanently staffed by a doctor, a health visitor, a laboratory assistant, a nurse, a village midwife, and a cleaner. The support of the local community has been enlisted, and approval of the Governor of Khartoum Province received. The students are to be involved in every aspect of the project. Required personnel, transportation facilities, equipment, drugs, etc., and their estimated costs are listed.

1289 University of the Philippines, Comprehensive Community Health Program, Quezon City. *Midwife (hilot) training manual.* Quezon City, University of the Philippines. 116p. Engl. Unpublished document.

"Hilots" are the traditional birth attendants in the rural areas of the Philippines, and as such, they play a significant role in the care of rural women and newborn infants. Therefore, the comprehensive community health programme attempts to utilize hilots as a peripheral extension of the health team, particularly in prenatal work, family planning, health education, and nutrition. A training programme was introduced to improve the present practices of the hilots, and this manual is for teachers in the programme. It is designed to reach the typical rural hilot who has perhaps had no formal schooling; concepts and language are simple. The first part of the manual is concerned with the objectives of training, admission qualifications, and the required teaching staff and materials. Then follows a series of lessons providing general orientation for the trainee, and specific information on infection, menstruation and menstrual hygiene, pregnancy and prenatal care, labour, postnatal care, care of the newborn, care of the infant, and family planning. Each lesson is presented as a lecture/discussion and includes suggested activities and demonstrations and a list of teaching aids. The short final section of the manual discusses the activities and supervision of the hilot including objectives, performance reports, and record-keeping.

1290 USA, Department of Health, Education, and Welfare. *Indian health home nursing course: instructor's guide.* Washington, D.C., U.S. Government Printing Office, PHS Publication No.1339, Dec 1968. 116p. Engl.

This guide was adapted from the *American National Red Cross Home Nursing Instructor's Guide*, a pilot project to train Indian instructors on the Whiteriver Apache Indian Reservation in Arizona. The guide is designed to help Indian instructors set up community classes where home nursing skills will be part of continuing adult education in the community.

1291 Wesley Guild Hospital, Ilesha. *Guidance notes for nurses working in under-fives' clinics.* Ilesha, Nigeria, Wesley Guild Hospital, n.d. 17p. Engl.

This step-by-step instruction manual provides nurses with simple guidelines on taking a child's medical history, giving vaccinations and nutritional advice, checking signs and symptoms, and diagnosing and treating common ailments (e.g., malaria, diarrhea). There are also short sections with advice on care of the newborn, infant feeding, and family planning.

1292 WHO, Geneva. *Statistical principles in public health field studies: fifteenth report of the WHO Expert Committee on Health Statistics.* Geneva, WHO Technical Report Series No.510, 1972. 32p. Engl. 20 refs.

This report illustrates the use of statistics in descriptive, explanatory, operational, and technical public health studies. Research methodology and field factors related to data collection are explained in brief. Data handling and analysis are viewed in terms of their usefulness in reporting study results to workers and planners. The report culminates with the following recommendations: (1) early publication of a previously prepared WHO manual on sampling; (2) preparation of manuals and other material on principles and special statistical problems in (i) field studies on disease aetiology and effects of control measures, (ii) long-term, large-scale, collaborative experiments on intervention measures, and (iii) subjects presenting specific problems, e.g., cancer treatment, coronary heart disease, and mental health; (3) encouragement of research into statistical principles and methods of public health field studies, particularly in the area of evaluating the efficiency of newly implemented, current public health programmes; and (4) the convening of a meeting of experts to discuss the statistical aspects and practical utility of mathematical models in planning and administration of health services.

1293 Yen, J., Feliciano, G.M. *Rural reconstruction and development; a manual for field workers.* New York, Frederick A. Praeger, 1967. 426p. Engl.

This manual evaluates social approaches to rural reconstruction; it incorporates the experience of specialists of the International Institute of Rural Reconstruction

(IIRR) and the Philippine Rural Reconstruction Movement (PRRM). The manual discusses the PRRM health programmes, health centres, health workers, mothers' classes, environmental sanitation, and immunization. The objectives include: the establishment of a small but active barrio health centre to be used for promotion, education, and first aid; the training and activating of a team of auxiliary health workers; and the enlistment of social participation in the construction and use of sanitary toilets. The disposal of human waste using the water-sealed toilet is a very important project and is promoted in the face of local resistance. A special sanitation and deworming campaign is under way. Field workers ensure maximum protection for the community through immunization. Obstacles to these programmes arise from ignorance, misinformation, and superstition, and suggestions have been offered toward overcoming them.

IV.7.2 Family planning and midwifery

See also: 0703, 1229, 1241, 1249, 1279

1294 **Ables, H.A., Roque, F.H.** *You can improve your lecture: a simplified guide for trainers in family planning.* Quezon City, UP/IMC-UNESCO-UNFPA Project on Family Planning Communication, n.d. 24p. Engl.

This brief guide is designed to assist lecturers, training-programme administrators, teachers, etc. in the preparation and delivery of a talk. Although intended primarily for workers in family planning, it could prove useful to all those who administer or conduct group learning activities. With simple lists and illustrations, the guide describes points to remember when preparing and delivering a talk so as to make the presentation as effective as possible. Also included is a section on visual aids, the advantages and disadvantages of the different types available, and pointers on using them.

1295 **Aramburu, G.** Guatemala, Ministry of Public Health and Social Welfare. *Programa de adiestramiento de promotores rurales en salud y de comadronas empiricas en las areas rurales. (Training programme for rural health promoters and traditional birth attendants in Guatemala).* Guatemala, Ministry of Public Health and Social Welfare, Nov 1971. 29p. Span.

Unpublished document. See also entry 1298.

Despite the addition of the rural health technician to the health team, adequate health care coverage has not yet been attained in rural Guatemala. As a result, the Ministry of Public Health in collaboration with UNICEF resolved to launch an official programme for the intensive training of locally recruited rural health promoters and empirical (traditional) midwives. The official programme, begun in 1971, is to be completed by 1975; its objectives are to provide the rural population with integrated basic health programmes, promote an interest in better health at the community level, and staff each health post with competent auxiliary personnel. The basic course lasts 3 months – one of theoretical training and two of practice in the field. The basic training curriculum is outlined. The proposal also advocates the formation of a pro-health committee, made up of community inhabitants, to motivate the people to use the services of the health promoter and the trained midwife and to foster programme permanency.

1296 **Calderone, M.S., ed(s).** *Manual of family planning and contraceptive practice.* Baltimore, Md., Williams and Wilkins, 1970. 475p. Engl.

This comprehensive textbook is concerned mainly with family planning in the Western world, particularly the USA. There are sections on medical and social indications for contraception, present policies for family planning, the roles of voluntary organizations and government agencies, and an evaluation of the different methods of contraception. There are also some brief references to the involvement of nurses, nurse-midwives, and social workers in family planning, including a discussion of their training. Numerous references are cited.

1297 **G.D. Searle and Co., New York.** *Family planning with the pill: a manual for nurses.* New York, G.D. Searle and Co., Reference and Resource Programme, 1967. 67p. Engl.

This manual is part of the Searle Reference and Resource Programme, which is designed to serve the needs and interests of public health officials, nurses, welfare workers, and other professional workers concerned with family planning and education for responsible parenthood. The book begins with a discussion of the population explosion and its control, followed by a survey of family planning techniques and discussions of the pill and user responses. The role of nurses in family planning is discussed with respect to attitudes and policies, and the changing pattern of nursing service. The final chapter deals with a set of quizzes on pill use.

1298 **Guatemala, Ministry of Public Health and Social Welfare.** *Guia para adiestramiento de comadronas empiricas. (Training guide for the traditional birth attendant).* Guatemala, Ministry of Public Health and Social Welfare, 1969. 207p. Span.

See also entry 1295.

Over 75% of the babies born in Guatemala each year are delivered by empirical (traditional) midwives. With some training in hygienic practice, and under professional supervision, these women could prove invaluable members of the health team. This guide has been prepared to enable the professional midwives and nurses who work in collaboration with the Maternal Health Department to impart uniform instructions to empirical midwives. As a result of the equipment shortages with which the midwife must cope, more emphasis has been

put on principles than on procedures. The following three points are emphasized: the midwife, her equipment, her surroundings, and the mother-to-be must be kept clean; the birth of the child must not be interfered with; and the midwife must be able to recognize and know what to do in the presence of abnormal symptoms. The guide contains the regulatory provisions of empirical midwifery, course programming, and samples of documents presenting the programme to local rural authorities.

1299 Hazelden, D., Perl, S., ed(s). *Talking family planning: a fieldwork handbook.* London, International Planned Parenthood Federation, Mar 1975. 94p. Engl. 33 refs.

The field-worker is the bridge between the family planning programmes and the people they serve. This handbook was written primarily for fieldwork organizers and supervisors, but as many of the topics are of interest to all field-workers, it is hoped that they too will have access to its contents. After describing the scope of the family planning field-worker's job, the handbook offers advice on understanding the audience, talking with clients, cooperating with other community workers, using audiovisual aids, recruiting/selecting/training field-workers, and planning/managing/evaluating the programme. There is also a bibliography of further reading, and an account of two IPPF-sponsored workshops that were held in Kenya and Nigeria to establish guidelines on the structure, content, and organization of family planning fieldwork in Africa.

1300 India, Ministry of Health and Family Planning. *Training guide for district extension educators: family planning.* New Delhi, Department of Family Planning, Ministry of Health and Family Planning, n.d. 76p. Engl.

District extension educators in India are responsible for the planning and organization of educational programmes that encourage people to have small families. The curriculum of a 30-day training programme for district extension educators is outlined in detail. Like its forerunner, the 60-day training programme, it is field-based and skill-focused; training is conducted at a rural primary health centre, under conditions similar to a working situation. The course is divided into three stages: health and family planning programming and community diagnosis; planning a training and educational programme (for health or family planning workers, community leaders, and the community itself); and implementing, evaluating, and reporting training and educational programmes. Evaluation of the trainees, the trainers, and the curriculum is encouraged throughout the programme. A list of recommended films (obtainable in Hindu and/or English) is included.

1301 International Planned Parenthood Federation, London. *Family planning: a guide to methods for fieldworkers, health, social, and welfare workers.* London, International Planned Parenthood Federation, May 1973. 28p. Engl.

The aim of this short booklet is to provide family planning and other interested field-workers with a handy reference work that can be carried with them. It is not a comprehensive survey, but with simple text and illustrations it presents basic information on contraception, the importance of family planning, and the many different methods available. A special feature is the inclusion of questions most frequently raised and appropriate answers concerning individual contraceptive methods and family planning in general. A list of additional teaching aids is included, together with the addresses of IPPF regional offices and member organizations around the world.

1302 Saborio, D.S., de Badilla, H.G., de Guillen, R.V. Costa Rica, Ministry of Public Health. *Manual para parteras empiricas de Costa Rica. (Manual for traditional birth attendants of Costa Rica).* San Jose, Ministry of Public Health, 1966. 46p. Span.

This manual, written in an easily understood step-by-step manner, was prepared by the Costa Rican Ministry of Public Health for her traditional empirical midwives. It contains instructions on using the midwives' kit; home visiting prior to the birth of the child; recognizing the signs of labour; attending the delivery (three stages); caring for the newborn; and making postpartum visits. The importance of recognizing conditions (such as prematurity) that necessitate the presence of a doctor or nurse is emphasized.

1303 Togo, Ministry of Public Health and Social Affairs. *Cours de recyclage des accoucheuses auxiliares. (Refresher course for auxiliary midwives).* Lome, Directorate General of Public Health, Ministry of Public Health and Social Affairs, Sep 1969-Feb 1970. 102p. Fren.

The auxiliary midwife in rural Togo is responsible for conducting normal deliveries under antiseptic conditions; caring for women before, during, and after delivery; following up their children until school age; and providing mothers with health education and advice. To aid her in this undertaking, this collection of texts and flash-cards, developed during refresher courses for auxiliary midwives, serves as a useful reference text and also provides educators with teaching material. A considerable portion is devoted to birth control methods, and these as well as other procedures are illustrated.

1304 Trivedi, S., Tripathi, V., Prakash, A. *Functional education kit for family life planning: a guide book.* Lucknow, India, Literacy House, May 1972. 119p. Engl.

The book contains instructions on how to use the various teaching aids contained in the Family Life Planning Education Kit for use in rural India. Items contained in the kit include flash cards, a "khaddargraph" or flannel board, flip book, pie charts, pictogram charts, models, posters, and a book of songs on family life planning; all point out the need for, advantages of, and

techniques and methods of family planning. Additional material on applied nutrition and prenatal and child care is included.

1305 Venezuela, Ministry of Health and Social Welfare. *Pautas que deben regir el control prenatal en los centros materno-infantiles, centros de salud y medicaturas rurales. (Guidelines on prenatal care for maternal and child centres, health centres, and rural health posts).* Caracas, Ministry of Health and Social Welfare, Dec 1969. 9p. Span.

This is an easy-to-read manual intended for anyone providing pre- and postnatal care at prenatal clinics throughout Venezuela. It seeks to ensure a normal pregnancy and delivery under the best possible conditions. To accomplish these objectives, the manual lists steps to be taken by professional medical personnel, e.g., physical examinations, laboratory analysis, prescription of diet supplements, etc. Where these functions are performed by empirical midwives, the manual recommends that particular supervision be exercised. It impresses upon the auxiliary health worker the sanitary measures to be taken during and after pregnancy and the initial care of the newborn.

1306 WHO, New Delhi. *Notes for the practising midwife.* New Delhi, WHO Regional Office for South East Asia, Aug 1973. 61p. Engl.

These notes were prepared for the use of midwives, nurse-midwives, and auxiliary nurse-midwives who have had basic training in midwifery but none in domiciliary or medicosocial work. Although intended primarily as a handbook for domiciliary use, it is hoped that the notes will prove equally useful as a teaching aid, especially in the training of auxiliary nurse-midwives for work in rural areas. With simple instructions, emphasis on points to remember, lists of procedures, etc., they cover the following topics: the duties of the domiciliary nurse-midwife and her role in the health team and the rural health programme; training and supervision of dais; equipment and its care in domiciliary practice; pre- and postnatal care; home delivery and care of the infant; records and record keeping; coping with handicapped children; and some guidelines on opportunities, subjects, and techniques for health education.

V. Formal Evaluative Studies

V.1 Health manpower

See also: 0850, 1150, 1217, 1234

1307 **Bhatia, J.C., Dharam, V., Timmappaya, A., Chuttani, C.S.** National Institute of Health Administration and Education, New Delhi. *Indigenous medical practitioners and their attitudes towards the proposed rural health scheme.* NIHAE Bulletin (New Delhi), 5(4), 1972, 298-306. Engl.

This study focused on the attitudes, reactions, and willingness of indigenous medical practitioners (i.e., persons practicing full time any type of curative medicine without having recognized qualifications in modern medicine) to participate in the proposed Indian rural health scheme. Of 93 practitioners interviewed, only 17 (17.2%) indicated interest in the scheme. Factors such as age, general and professional qualifications, experience, registration status, income, patient load, etc. were statistically correlated with the willingness to participate. Results suggested that practitioners under 25 were more willing than were the older ones; longer experience in the profession, higher income, and higher patient load negatively influenced willingness to participate. The majority of those who were ready to participate in the scheme were not registered with any system of medicine.

1308 **Borland, B.L., Williams, F.E., Taylor, D.** *Survey of attitudes of physicians on proper use of physician's assistants.* HSMHA Health Reports (Washington, D.C.), 87(5), May 1972, 467-472. Engl.

A survey of physicians' attitudes toward physician assistants and their possible duties was carried out in the 27-county areas of the Susquehanna Valley Regional Medical Program (SVRMP), California. A questionnaire, which incorporated the objectives of the study, was sent to the 1 997 physicians on the SVRMP mailing list; completed responses totaled 637. Variables that might affect responses were taken into consideration: type and characteristics of practice, perceived need for more physicians in the community, and the ability of the community to recruit. Fourteen activities that a physician assistant might perform were listed with a choice of yes, no, or don't know responses. Finally, each respondent was asked to indicate whether employing a physician assistant would be practical for him. Results showed that most physicians accept the concept of a physician assistant, but duties proposed that dealt with diagnosing or prescribing were not considered appropriate by a large portion of respondents. A correlation between responses about appropriate duties and medical speciality was noted: the more closely a duty related to a speciality, the more apt a positive response. The responses indicated communities need more physicians and that the physician assistant may alleviate the need. Speciality-oriented training should be considered.

1309 **Bui-Dang-Ha-Doan, J.** *Chronique de demographie et de sociologie medicales: les professions para-medicales. (Chronicle of demography and medical sociology: the paramedical professions).* Le Concours Medical (Paris), 87(47), 20 Nov 1965, 6939-6945. Fren. 8 refs.

The author reports demography of paramedicals in France: how many, in what professions, where they are practicing, and what type of practice they are engaged in. He analyzes the data available from the 1962 census and views the trends in midwifery, nursing and chiropody, and physiotherapy separately. He notes that the diplomas granted to midwives sharply declined after the Second World War and stabilized around the mid-1950s. The statistics indicated fewer people were entering midwifery and the average age of midwives was 52.6 years. The author attributes this drift away from the profession to midwifery's "old-fashioned" reputation. The nursing and chiropody professionals increased in numbers as did those in physiotherapy, a relatively new profession. In fact, physiotherapists in private practice doubled in 10 years and the percentage under age 30 jumped from 11 to 19. The author concludes that the decline in midwifery is indicative of the metamorphoses in the health profession, but he forecasts an overall shortage of paramedicals in the next 20 years if institutions and demands for health services do not change.

1310 **Coye, R.D., Hansen, M.F.** *Doctor's assistant: a survey of physicians' expectations.* Journal of the American Medical Association (Chicago), 209(4), 28 Jul 1969, 529-533. Engl.

Physicians' attitudes toward the "doctor's assistant" were the crux of a 1969 survey of members of the Wisconsin State Medical Society (USA). Of those who received the questionnaire, 32% responded. Although a majority agreed that assistants should be excluded from performing physical examinations, emergency

room procedures, anaesthesia, postoperative care, deliveries, prenatal and well-baby care, in all cases some physicians approved these tasks. Physicians practicing in small communities were more likely to consider delegating duties, and this phenomenon probably reflects the doctor shortage there. The respondents tended to reply negatively to duties closely related to their speciality, i.e., no anaesthetist believed assistants should administer anaesthesia; few obstetricians felt deliveries were an acceptable duty for assistants. A notable exception could be found in pediatricians' responses where 25% agreed that assistants could provide well-baby care. Analysis of the responses suggested interest in two types of assistant: a surgical technician in operating and recovery rooms and an office practice assistant. Respondents apparently were willing to delegate medical history-taking to both types. The authors comment that as medical history is a vital part of good patient care, "the respondents undoubtedly meant that an assistant would obtain only a preliminary history..." Tabulated responses are presented.

1311 **Dissevelt, A.G., Vogel, L.C.** *Analysis of the operations of the medical assistant in an outpatient department with the emphasis on administrative procedures.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 51-57. Engl.

Appeared also in "Whither Rural Medicine?"; see entry 907.

The most feasible and immediate means of coping with the increasing numbers that attend the outpatient departments of government hospitals in Kenya is to increase staff efficiency. Therefore, the purpose of each activity, its site, the persons it involves, etc. must be determined and alternatives considered. For example, workstudy techniques (method study and work measurement) were applied to the medical and clerical activities of the medical assistant. Examination of the findings indicated that repeating patients could be rerouted to bypass the medical assistant and the responsibility for completing an outpatient register could be shifted to a record clerk, thus increasing the productivity of the medical assistant by about 35%.

1312 **Mojekwu, V.I.** *Educational planning for the training of rural health workers for children under five years in Nigeria: a method and a model.* Cambridge, Mass., Harvard University, 1973. 145p. Engl.

Microfilm of doctoral thesis, Harvard University.

The relationships between what one is taught, how one performs, and what tasks one should be taught determine the quality of care. The objectives of this study, then, were to investigate and assess these relationships in the care of children under age 5 in the rural East Central State (Nigeria). The author ereated the Rural Under Five Task Observation Model (RUFTOM) as a method of comparing what was taught in schools with what was needed in prevention and treatment of four commonly seen diseases. He also devised a test to show whether health workers were aware of their limitations. Fifty health workers (among the community nurses, midwives, and dispensary assistants) were subjects of the study. The data collected indicated that tasks taught in school were better performed than those that were not, but in all cases more tasks were performed than were taught in school. Scores for tasks of prevention were low (the dispensary assistants received an average 3.3% in this area), and students were not able to recognize their limitations and at what point to refer patients to a doctor. It was concluded that training should better prepare health personnel for tasks of health education and prevention. Although firm data for mortality and morbidity were not available, an attempt has been made to collect indicators. Coded scores are tabulated and diagrams of coding forms presented.

1313 **Simmons, O.G.** *Clinical team in a Chilean health center.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 325-348. Engl.

The San Lucerno Health Center, Chile, emphasizes health education as the most effective means of realizing programme objectives. The nurse there, initially, had undertaken educational work both in the home and in the clinic. A new arrangement, however, removed the nurse entirely from the clinic to promote health education on a full-time basis in the home, in order to allow the part-time doctor to concentrate on his public-health role at the centre. This arrangement led to a serious impairment of communication between doctor and nurse. The doctor was insulated from the nurse's special knowledge of the patient, while the nurse had little access to the doctor's clinical activity. The doctor became even less effective in getting across to the patient any health education message, and the nurse lost those insights into the patient's situation formerly derived from her participation in the clinic. Effects of the change on the education programme in the homes were not determined.

1314 **Taylor, C.E., Dirican, R., Deuschle, K.W.** *Health manpower planning in Turkey: an international research case study.* Baltimore, Md., Johns Hopkins Press, 1968. 300p. Engl.

The primary objectives of the Turkish Health Manpower Study were to determine how the nation's health needs could best be met and to improve the methodology of data collection and analysis. Areas examined were Turkey's health problems and disease patterns; numbers, distribution, and types of health personnel, and their future supply; organization and administration of health services; and present and future manpower demands. Resulting recommendations concern definition of health priorities, administrative changes, improvement of working conditions, and quantitative and qualitative changes to the training programmes.

1315 **Thailand, Ministry of Public Health.** *Report on the result of survey of the utilization of health*

manpower and expenses incurred in medical treatment of the people. Bangkok, Ministry of Public Health, 1970. 44p. Engl.
Unpublished document. See also entry 1316.

This is an account of a nationwide survey in Thailand to determine the pattern of morbidity, the type of medical care sought, and the expenses incurred by the people during March-April 1970. The purpose of the survey was to discover the type of medical facility and/or personnel in demand and the amount of money paid to them. This information could then be used to project future national medical and manpower needs. Families from both rural and municipal areas were selected at random and were interviewed by newly graduated sanitarians and public health nurses. The results of the survey are presented in 16 tables (a 17th deals with data on family planning). Results of the study indicate that Thais spent approximately 5 376 million baht (national currency) on private medical care, whereas in the same year public medical expenditure amounted to 1 320.9 million baht. Urban dwellers tended to turn to private or government hospitals and clinics for relief, while rural dwellers relied on self-treatment with drugs; "injection," herbal, or magical doctors; and indigenous midwives.

1316 Thailand, Ministry of Public Health. *Report on morbidity, health practices, and expenditure incurred in eight rural villages of Thailand.* Bangkok, Ministry of Public Health, 1970. 16p. Engl.
Unpublished document. See also entry 1315.

The morbidity, health practices, and medical expenditures of 120 families in eight rural Thai villages were surveyed for 1 year. The object was to identify rural problems in human resource development and to aid in formulating relief measures. The interviewers – graduate students working toward a master's degree – lived in the villages during the study and collected data weekly. The results are set forth in seven tables under the following headings: number of sick individuals per population under survey; rate of sickness (in percentage); number of expressed illnesses; number and percentage of visits to various types of healers; health expenditure per family; number of episodes (occurrences of illness) per year; and the number of diseases/conditions reported. The comparative reliability of this survey and a shorter nationwide survey with the same objectives is briefly discussed.

1317 University of West Indies, Department of Social and Preventive Medicine, Kingston, Jamaica. *Report of "work of community health aides" in the parish of St. Elizabeth.* Kingston, Jamaica, University of West Indies, Department of Social and Preventive Medicine, 12 Apr 1972. 2p. Engl.
Unpublished document.

In 1970, the first group of Jamaican community health aides graduated. Their training in public health prepared them for the following duties: home visiting, nutrition instruction, maintenance of patient records, surgical dressing, immunization, diagnosis of malnutrition, and assistance in family planning clinics. The aides proved particularly adept at pointing out to parents foods that had higher nutritional content, yet cost no more, than those they were presently feeding their children. The aides were readily accepted by their fellow Jamaicans and had no language barrier or racial prejudice to contend with. Two years after programme implementation, it was observed that aides were still not being compensated for transportation costs, that they had not yet been given permanent appointments, and that their clinics were understaffed (one nurse and one aide), but that this worthwhile experience merited the training of more community health aides.

1318 Westheimer, R.K., Cattell, S.H., Connell, E., Kaufman, S.A., Swartz, D.P. *Use of paraprofessionals to motivate women to return for post-partum check-ups.* Public Health Reports (Washington, D.C.), 85(7), Jul 1970, 625-635. Engl.

The feasibility of using neighbourhood recruits as community health workers who would motivate women to return for postpartum or postabortion checkups and family planning services is evaluated. Eleven women from the neighbourhoods of two New York City hospitals were trained to administer a detailed questionnaire and to impress patients with the need for these health services. Selection of project staff and the method of training are detailed. The results of the project – characteristics of the target population, the numbers of home interviews conducted, the influence of these on the return rate, etc. – are also analyzed. The number of women who returned for postpartum checkups was disappointing but the authors considered this to be due to the nature of the task rather than a reflection of the training and capabilities of the "paraprofessionals"; the target population was a difficult group of patients who had ignored previous appointments; some had moved away; others had since attended a different clinic. The authors believe that a group of neighbourhood women can be hired and trained to carry out a series of complex tasks under difficult working conditions, as this project successfully demonstrated.

V.2 Organization and administration

See also: 0798, 0814, 0850, 0900, 1025

1319 Abramson, E.J., Arnold, R., Piper, G. Canada, Department of National Health and Welfare. *Community health worker program: analysis and evaluation.* Ottawa, Department of National Health and Welfare, n.d. 39p. Engl.
See also entry 1167.

Canadian Indians and Eskimos are being trained as auxiliary health workers to help their people recognize and solve health problems. Candidates are selected by

the local community and undergo training, which comprises 2 months field orientation, 3 months formal tuition, and a probationary period with further on-the-job training. All aspects of the programme are under continuous review, and this particular document is an evaluation conducted by independent sociologists. The report discusses prejudices and communication problems that have arisen – some are based on suspicion and mistrust, some are caused by language problems, and others stem from traditional attitudes to youth and to the roles of men and women. Also described are the ways in which a stable working environment, community leadership, prevailing economic and social conditions, the public image of the health worker, local social organizations, and home visits have influenced the programme. Suggestions offered for future development of the programme cover training and selection of candidates, use of teaching aids, integration with other aspects of community development, and job enrichment (including a newsletter for all persons connected with the health workers to encourage exchange of experiences and innovations). The investigators conclude that the programme is working successfully considering the difficulties involved.

1320 **Alling, G.E., Morley, D.C., Philpott, R.H., Simmons, G.** Christian Medical Commission, World Council of Churches, Geneva. *Church-related medical work in Rhodesia.* Geneva, Christian Medical Commission, 1973. 30p. Engl.

An evaluating team of health consultants report on church-related medical work in Rhodesia. A survey was conducted to (1) assist church-related hospitals in Rhodesia in reevaluating their present health services; (2) set priorities in relation to health needs; and (3) plan for future development of church-related medical services both ecumenically and in relation to government plans. To further the relationship between church and government health workers, church-related medical workers were invited to participate in provincial seminars. The report reviews statistical data on Rhodesia: its geography, population, vital statistics concerning morbidity and mortality, etc. The health care system and training facilities for nurses, physicians, and paramedicals (i.e., medical assistants and health assistants) are described. Health assistants are considered important members of the health team and they are trained to assist medical assistants at the village level. It is hoped that both the survey and the participation with government workers in seminars will lead to more complete coordination of activities among churches themselves and collectively with the government. Concrete suggestions for training and administrative changes are made.

1321 **Banta, H.D., Fox, R.C.** *Role strains of a health care team in a poverty community: the Columbia Point experience.* Social Science and Medicine (Oxford), 6(6), Dec 1972, 697-722. Engl. 19 refs.

An interview study of the professional functioning of health care teams in a low-income housing project was conducted. The setting was the Columbia Point Health Center, the first Office of Economic Opportunity-sponsored neighbourhood health centre, located in Boston, Massachusetts (USA). The participants interviewed included physicians, nurses, and social workers. Columbia Point proved to be a more stressful milieu in which to work than most of the health professionals involved had anticipated. Various "cycle of poverty" aspects of the project created difficulties for them, as well as for the residents whom they were mobilized to serve. In addition, role relations between the different categories of health professional who composed the teams constituted an important source of strain. The study points up the fact that high motivation to work as a member of an interdisciplinary health team in a poverty setting is a necessary, but not a sufficient, condition for such a collaborative endeavour. Appropriate, clear, supple role definitions worked out by participating health professionals prior to their entrance into the field, facilitated by a process of anticipatory desocialization from certain role-patterns to which they are accustomed, would seem to be prerequisites. (Revised journal abstract.)

1322 **Beamer, L.G., Gangloff, L.J., Gauldfeldt, F.I.** USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: VI. Haiti.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)72-35, Nov 1972. 42p. Engl. 22 refs.

Volume six in a series of studies sponsored by the U.S. Agency for International Development examines the relationship between health and socioeconomic development in Haiti, according to the methodology developed in former volumes. Most Haitians suffer from insufficient caloric intake. Infant and child mortality is high; malnutrition and kwashiorkor are widespread; and growth, especially among rural children, is generally stunted. The local superstitions and the Haitian psychology and political character have contributed to the aggravation of health problems. The present health care delivery system is outlined, and a review of the major PAHO projects (1971-74) in Haiti is included.

1323 **Boyd, E.** *Castro remodels the system.* Canadian Medical Association Journal (Ottawa), 111(9), 2 Nov 1974, 991-1002. Engl.

The system of health care developed in postrevolutionary Cuba is reviewed. The Ministry of Public Health directs a national programme that encompasses hospitals, health centres (polyclinics), industrial and environmental health, the pharmaceutical industry, medical and paramedical education, etc. Regional centres administer the health services organization. The author describes in some detail the operation of the large health region of Havana – its staff, facilities, population served, types of health problems, numbers of patients, mortality data, etc. He visited some of Havana's hospitals, as well as rural and urban polyclinics, nutritional units, and a maternity home; the activities, staff, and facilities of these, and their utilization are described. The country's facilities for medical education and training in public health are also briefly referred to.

The author notes that there is a need for improved budgeting, increased use of auxiliary health workers, and a decrease in the number of fully qualified physicians who are appointed to administrative posts; however, he believes that Cubans are enjoying the best health care in Latin America and the country's health services could be a model for the rest of the world.

1324 **Chen, L.C., ed(s).** *Disaster in Bangladesh: health crises in a developing nation.* New York, Oxford University Press, 1973. 290p. Engl.
Individual articles have been abstracted separately under entries 746, 860, 1336, 1385, and 1391.

The first part of this book about health in Bangladesh presents a background description of chronic health problems. The second part focuses on the crises precipitated by the cyclone of 1970 and the civil war of 1971. The concluding part offers recommendations for more effective handling of relief operations during future disasters. This volume aims at presenting the critical health issues confronting Bangladesh, examining scientifically the effect of disasters on health, and analyzing the lessons learned in relief experiences for future application. Individual authors have contributed articles dealing specifically with population, nutrition, infectious disease control, health manpower and organization, health priorities for refugees, disaster relief, etc.

1325 **Costa Rica, Ministry of Public Health.** *Memoria anual: Ministerio de Salubridad Publica, 1972. (Annual report of the Ministry of Public Health, 1972).* San Jose, Ministry of Public Health, 1972. 44p. Span.

Costa Rica is trying to meet the goals of the Decennial Health Plan for the Americas (1971–80). These are: the provision of minimum health services to all inhabitants of communities of fewer than 2 000 persons through a regionalized health system and the implementation of preventive measures such as water supply services, sewage treatment, and water, ground, and air pollution control systems. To control the intestinal parasitic diseases that affect 90% of the population, a programme was approved in 1971 to provide all households with water closets over a 5-year period. The rural health programme is a combined effort of the Government of Costa Rica, the United Nations Children Fund, and the Pan American Health Organization. Its objective is to improve individual and collective health standards in "ultra-rural" areas by means of trained auxiliary health workers. In 1972, 68 such workers were trained. This report is basically a statistical summary of what has been accomplished in the field of health services in 1972, in relation to previous years.

1326 **Ghosh, T.N., Basu, B.K., Bhagi, R.P.** *Treatment defaults among tuberculosis patients seen in a rural clinic near Delhi.* Indian Journal of Chest Diseases (New Delhi), 14, Jan 1972, 28-31. Engl.

Both research and clinical experience in India show that many patients discontinue medical treatment, even while still manifesting symptoms of disease. A detailed investigation was undertaken to uncover reasons for default of treatment among tuberculosis patients. Research was carried out on 1 342 patients treated in a municipal clinic that services about 90 villages near Delhi. Four kinds of action were used to encourage patients to resume treatment: written appeal, personal appeal through a community representative, home visit from a clinic health visitor, and home visit from a clinic health visitor accompanied by a doctor. More than 50% of the patients became defaulters, males predominating among these. Causes of default were carelessness on the part of the patients and lack of proper education on the part of the clinic health visitors. In the case of patients who did return to the clinic within 2 months of treatment, a visit by the health visitor was the most effective means of conversion. Communication by community representatives did not succeed. The authors conclude that more staff are needed in rural clinics.

1327 **Indonesia, Department of Health, National Institute of Medical Research.** *Abstracts of presentations at the seminar on public health research, 30 Jul-3 Aug 1973, Jakarta.* Jakarta, Department of Health, National Institute of Medical Research, 1973. 1v.(unpaged). Engl., Indonesian.

This document is a compilation of more than 40 abstracts of papers presented at a seminar on public health research in Indonesia. The abstracts, most of which are in English, cover a wide range of topics. Included are results of several surveys into such diverse fields as the incidence of induced abortion, morbidity and mortality patterns, the attitude of the community toward health services, disease transmission, etc. There are a number of accounts concerned with vector control, management of disease, and clinical evaluation of drugs. There are also abstracts on the operation of the health services, including the utilization of health manpower and facilities, and the development of the family planning programme.

1328 **Jara, J.B.** Chile, National Health Service. *Analisis de la atencion medica rural en la 10a. zona de salud: 1967. (Analysis of rural medical care in health zone No. 10: 1967).* Temuco, Chile, Zone 10, National Health Service, 1967. 1v.(various pagings). Span.

Over the last 15 years (1952-67) Chile's National Health Service has succeeded in resolving the main problems of urban health care delivery. Those problems remaining cannot be resolved without first reorienting rural health care systems that are still defective. Urban health centres and hospitals are permanently congested by an influx of patients from rural areas. Steps must be taken to eliminate the need for such massive displacement. In 1966, 11 rural health centres of the 10th Rural Health Zone were investigated. It was confirmed that the diseases responsible for medical consultation and care were primarily enterocolitis, neurosis, bronchitis, and heart disease. Statistics on disease incidence indicate that some of these could be prevented by sanitation measures, suitable nutrition, and

education, whereas others could be prevented by mental hygiene and an analysis of personal factors. A chart indicates (1) the number of hours per month to be devoted to rural health care by each member of the health team (physician, dentist, midwife, nurse, and auxiliary health worker), and (2) the number of vehicles required to provide minimum services.

1329 **Johnson, K.G.** *Analyzing your health delivery system.* Yonsei Medical Journal (Seoul), 11(2), 1970, 208-219. Engl. 15 refs.

The first step in a systematic approach to the study of a health care delivery system is to examine the country's health problems. Use can be made of quantitative and qualitative health indices (mortality, fertility rates, child growth and development profiles), but equally important are the "nonhealth" indices (illiteracy rate, GNP/capita), which can provide insight into the community's health problems. The second step is to determine available resources; this requires not only a study of the ratios of population size to doctors, nurses, and hospital beds, and the total amount of money, its source, who spends it, etc., but also the nonmedical resources that will influence health care delivery, such as transportation, communications, education. Constraints that require attention will be related to the system's organization (e.g., financial control, the fusion of public health/preventive medicine/curative medicine); its processes (flow of professional personnel, the way decisions are made, flow of patients); its interaction with the rest of society; and the motivation, purposes, and values of the institutions and individuals involved in the system.

1330 **Messing, S.** *Discounting health: the issue of subsistence and care in an undeveloped country.* Social Science and Medicine (Oxford), 7(11), Nov 1973, 911-916. Engl.
Third International Conference on Social Science and Medicine, Elsinore, Denmark, 14-18 Aug 1972.

The anxiety associated with living at subsistence level significantly impedes the progress of health programmes. Disregarding this economic pressure on peasants invalidates any health service evaluation such as a cost-benefit ratio, which depends on measurement of absenteeism due to sickness. The author (an anthropologist) proposes analysis in terms of "discounting health," i.e., the rural dweller's attitude that preventive health behaviour does not provide sufficient rewards to be worthwhile. Living conditions are such that legislation governing hygiene is unenforceable, and the health officers who urge spending for health measures will not be heeded as long as there are poor living standards, low incomes, and harmful traditional health attitudes and practices. It must be recognized that the problems of health care in Ethiopia and other underdeveloped countries cannot be solved in isolation from other problems; training courses in public health, therefore, must include the economic, attitudinal, and legal aspects of a rural dweller's day-to-day existence. Subsistence anxiety needs to be allayed by developing the economy and by introducing social security measures and realistic laws governing health behaviour. Simultaneously, there should be educational developments to ensure that children are in school, not in the casual labour market, and that public health concepts are introduced early.

1331 **Mishra, V.N., Mathur, J.S., Gupta, R.R.** *Attitude of rural people towards field training centre.* Indian Journal of Public Health (Calcutta), 15(4), Oct 1971, 139. Engl.
See also entry 1332.

A rural field training centre was established in 1962 to provide comprehensive health care for the persons living in Kaliampur Block (India). To find out the attitude of the local people toward the centre and to assess its usefulness and shortcomings as viewed by the community, every person over 15 years, living in two villages a mile from the centre, was interviewed – a total 417 people. Of these, 95% knew of the existence of the centre, and 67% had utilized its services for treatment of injury or disease. Awareness of the centre's functions and services was as follows: 93% knew about medical relief; 71% about communicable disease control; 36% maternity and child health services; 21% school health; 5% environmental sanitation; 5% health education, and 2% about its function related to vital statistics. Only 44% were satisfied with the centre's services.

1332 **Mishra, V.N., Gupta, R.K., Mathur, J.S., Gupta, R.R.** *Attitude of rural people towards health centre of medical college.* Indian Medical Gazette (Calcutta), 11, Aug 1971, 31-33. Engl. 9 refs.
See also entry 1331.

This brief report provides a statistical analysis of the results of a survey to determine the knowledge and attitudes of the population served by the rural field training centre at Kaliampur, India. A questionnaire was sent out and a total 417 persons above 15 years of age replied. Of these, most were eager to identify the shortcomings of the centre. For 81% (398), the chief complaints were waiting time spent in the centre (2-3 hours before being examined) and delays in getting medicines; the number of doctors working at the centre was considered inadequate by 16.5% (69). And 26% (109), believing that the doctors and paramedical staff were only pursuing their own interests, had no faith in allopathic medicine. Tables of data are presented on age and sex distribution of respondents, their awareness of the different activities of the centre, and the extent of utilization of services.

1333 **Orris, P.** *Role of the consumer in the Cuban national health system.* New Haven, Conn., Yale University, Department of Epidemiology and Public Health, 1970. 109p. Engl.

The design and organization of medical care systems throughout the world has become an area of intense study for health professionals. This particular study investigates the roles of the consumer and the Ministry

of Public Health in the Cuban health system. Consumer involvement in the planning of health policy, its implementation, as well as concurrent process review methods, is examined in this thesis. Interviews with professional and nonprofessional participants in the health system and site visits to health care institutions were conducted during a 2-month field study in July and August 1969. The same general areas were covered in each interview while the localities were chosen to reflect the diversity of demographic conditions on the island. A high degree of consumer participation was found in all localities, and each of the segments of the health delivery process demonstrated major consumer involvement. The consumer input was found to be effective, and its integration with professional input efficient. The major factor influencing the success of consumer involvement in Cuba and its failure in the United States, based on this preliminary investigation, is felt to be the degree of organization and astuteness of the consumers. (Revised author abstract.)

1334 Pan American Health Organization, Washington, D.C. *Facts on health progress 1971.* Washington, D.C., Pan American Health Organization, Scientific Publication No.227, Sep 1971. 65p. Engl.

With the signing of the Charter of Punta del Este in 1961, health goals for the member governments of the Pan American Health Organization were established. This monograph describes the progress after 10 years. It is intended to help reorient health programmes for the coming years by indicating the productivity of past investments and the future health requirements of the people. With emphasis on Latin America, the first chapter describes the changing population characteristics – growth rate, age distribution, educational level, work force, urban/rural distribution, and per capita income. The subsequent chapters note the overall goals in different fields – child health, communicable diseases, nutrition, environmental sanitation, national and local health services, health manpower, research and life expectancy – and for each of these a statistical analysis of regional and/or national achievements is presented.

1335 Roemer, M.I., ed(s). Pan American Union, General Secretariat, Organization of American States, Washington, D.C. *Medical care in Latin America.* Washington, D.C., Pan American Union, General Secretariat, Organization of American States, 1963. 329p. OAS/362/E/6712. Engl. 152 refs.

This monograph examines the different types of medical care programmes in operation in five Latin American countries – Peru, Brazil, Mexico, Costa Rica, and Chile. The data (compiled in 1962-63) are essentially concerned with the organization of different systems of medical care – indigenous, charitable, social security, government, private, etc. The first chapter outlines the general health problems and the need for medical care in Latin America. This is followed by five chapters detailing the medical care available in each of the countries under specific investigation. The common features and problems are then identified, and the final chapter offers specific, practical recommendations, in areas such as financing, personnel, organizational structure, to help bring about improvements in the medical care available in this part of the world.

1336 Rohde, J.E., Gardner, P. *Refugees in India: innovative health care programs.* In Chen, L.C., ed., Disaster in Bangladesh, New York, Oxford University Press, 1973, 167-189. Engl.
See also entry 1324.

An emergency health care delivery system was established in India to cope with 10 million refugees. This chapter of *Disaster in Bangladesh* describes the design of refugee health services in the presence of a severe physician shortage and focuses on health programme innovations, on-the-job physician training, use of auxiliaries, public health education, the role of foreign voluntary agencies in disaster medical care, and future health care programmes for Bangladesh. In one successful innovation, "Operation Lifeline," volunteer refugees followed a simple treatment protocol to detect and treat malnutrition, and in another, fish-protein concentrate was used as a protein supplement. Since many camp physicians were not familiar with all the illnesses that proliferated, a reference pamphlet on the most common medical problems was prepared for their use; it offered diagnostic "tips" and therapeutic programmes based on the camp's limited drug formulary. Public health information was broadcast over the radio, and auxiliaries, trained on site, provided hygiene instruction. Some voluntary foreign aid was provided; those foreign agencies who had indigenous roots, who utilized local personnel, or who had previous experience in disaster medical care fared better than those that acted independently. The host government, however, should have better coordinated the activities of all these organizations with those of its own mobilized forces.

1337 Shivaram, C., Prasad, B.G., Raj, B., Bhushan, V. *Repeat general health survey in a group of villages in the area of rural health training centre.* Indian Journal of Medical Research (New Delhi), 58(9), Sep 1970, 1134-1148. Engl. 10 refs.

This report compares two general health surveys undertaken 10 years apart in a group of four villages in the area of rural health training centre, Sarojini Nagar, Lucknow (India). The first general health survey was conducted in 1959; at that time 16.9% of the population was sick (22.9% in 1969), with respiratory disorders constituting the largest single group of illnesses. The average duration of sickness was 14.7 days. Maternal mortality in the 1969 survey was 2.7 per 1 000 whereas in 1959 it was 5.1. Birth rate, death rate, and infant mortality were stationary. About 41.1% of total deaths were infant deaths. Proportional mortality indicator, i.e., the ratio of deaths at age 50 years and over to

total death in the population, was 11.8%, and child survival index was 2.8. Some improvement in environmental sanitation was noted in 1969; however, food and calorie intake fell substantially. Immunization status against cholera and smallpox was 11.1% and 83.2%. (Modified journal abstract.)

1338 **Stewart, M.M.** *Health needs in Southeast Asia.* Journal of the American Medical Association (Chicago), 224(9), 28 May 1973, 1297-1298. Engl.
Letter to the editor.
The medical problems of South East Asia are predominantly those associated with communicable disease, malnutrition, rapid population growth, poor maternal and child health, poor environmental sanitation, and lack of access to adequate primary care, particularly in rural districts. Resources available for health services are insufficient and unequally distributed, long-range health objectives for the whole population being neglected in favour of the affluent urban elite. In Thailand, for example, three of four existing medical schools are in Bangkok where the doctor-to-population ratio is already 1:1 000, compared with 1:23 000 in more remote areas. Less than half the districts have primary health centres, and of these, one-third lack doctors. The rural individual, therefore, spends approximately five times the government's per capita health allocation on a flourishing, unofficial health care system of private clinics, spirit doctors, injection doctors, etc. The government's health care system and education for the health professions are too Western-oriented and inappropriate for existing national needs, and doctors and public health graduates are given little incentive to work in neglected rural areas.

1339 **Vorisek, J.A.** Koninklijk Instituut voor de Tropen, Amsterdam. *Colombia en zijn gezondheidsproblematiek. (Colombia and its health care problems).* Amsterdam, Koninklijk Instituut voor de Tropen, Afdeling Tropische Hygiene, 22 Aug 1972. 24p. Dutch.
Vital statistics on Colombia's geographic, demographic, economic, political, and social situation are given, and its health care problems outlined. Most of Colombia's medical personnel and facilities are concentrated in the cities and cater to the higher income groups. Only 8.8% of the population have health insurance. Most frequently occurring diseases are measles, whooping cough, malaria, tuberculosis, syphilis, and typhoid fever. The incidence of the last three, as well as of yellow fever, is much higher than the average for South America. The incidence of Chagas' disease is described as alarmingly high. Unsanitary living conditions and insufficient nutrition contribute to this situation, which will deteriorate if the population continues to increase at its present rate. Contraceptive methods are rarely used, as these are opposed by the Catholic Church, which exerts a strong influence in Colombia.

1340 **White, K.L.** *Evaluation of medical education and health care.* In Lathem, W., Newbery, A., eds., Community Medicine: Teaching, Research, and Health Care, New York, Appleton-Century-Crofts, 1970, 241-270. Engl. 23 refs.
Medical care processes (e.g., history taking, laboratory investigations, administrative follow-up) and the end results of care (e.g., mortality, period of disability) can be evaluated objectively. The author discusses the principles of evaluation, including the need to define the goals of medical education and of health care. Some different approaches used in evaluation and the collection of different types of data (administrative, personnel, and medical) are also described. Specific examples illustrate the scope of the evaluation of medical processes and the end results, and also demonstrate how establishing objectives helps to clarify the task of medical education by providing scientific criteria for measuring achievement. In the discussion at the end of the paper, some of the practicalities of evaluating a health programme are raised.

1341 **Woodruff, A.W.** *Medicine in Burma today.* British Medical Journal (London), 3, 26 Aug 1967, 551-554. Engl.
The evolution of health services in Burma is described. Medical services have been extended into the rural areas; local administrative services have been merged with those of the central government; there is close cooperation between military and civil medical services; and preventive/social medicine has been united with clinical work at hospital centres. The author describes the organizational structure of medical services at the township level; the key person is the township medical officer who is responsible for all the functions of the health department in his district. A type of hospital outside the health services is the Workers' Hospital; it is run by the Ministry of Labour for those who have joined a contributory scheme. The activities of Burma's medical schools and related teaching institutes (one extensive project being concerned with leprosy control) and of its Medical Research Council are also outlined in the article. The author believes the progress achieved in Burma, which has been accomplished with only limited external aid, should provide an example for other developing countries.

1342 **Woolley, P.O., Perry, C.A., Larson, D.L.** USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: V. El Salvador.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)72-35, Oct 1972. 53p. Engl.
Volume five in the series of studies supported by the U.S. Agency for International Development concerns the relationship between health care delivery and socioeconomic factors influencing health in El Salvador. Malnutrition, understaffing of health services, and poor sanitary conditions are prime concerns. Although health services are available to 85.6% of the population, more than half of all facilities are not permanently staffed. Sophisticated facilities are fairly evenly distributed throughout the country, yet 65% of deaths are not

physician certified. Although transportation is adequate and there are no obvious cultural barriers to seeking care, the people are still dying for lack of it. Mortality data reveal that seven of the 10 leading causes of death could be prevented by public health measures such as nutrition and sanitation programmes.

1343 **Woolley, P.O., Perry, C.A., Gangloff, L.J., Larson, D.L.** USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: IV. The Philippines.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)72-34, Jul 1972. 134p. Engl. 70 refs.

The fourth volume in a series of studies supported by the U.S. Agency for International Development analyzes the relationship between health care delivery and socioeconomic development in the Philippines. Based on the hypothesis that there are unifying sociocultural forces that influence the operation of government, education, health care delivery, economy, etc. in any country, the problem in the Philippines would seem to be that the government works at supporting modern ideas while overlooking certain cultural phenomena, such as migration to urban areas, poor nutritional status of the population, and failure to implement government programmes. The government, therefore, seems to be unable to institute and maintain meaningful programmes and facilities. The working orientation is toward short-term rather than long-term goals. A unifying national idealism, which might foster concern for the nation as a whole rather than the individual, is lacking. Concrete suggestions are made in light of other plans for social, agricultural, and economic development.

1344 **Yen, Y.T., Baker, T.D.** *Study on the quality of medical care in health stations.* Journal of the Formosan Medical Association (Taipei), 70(1), 28 Jan 1971, 21-27. Engl.

Despite the fact that health centres are considered the main resource for organizing health services in developing countries, little systematic research to assess the quality of their service has been done so far. Health services can be evaluated according to three criteria: results, expert judgment, and patient satisfaction. This study of medical care in health stations in Taiwan used expert judgment as its criterion. Senior medical students gathered data from 13 health stations throughout the country. Procedures used in the processing of patients as observed in the stations were compared to a systematized criterion of "sound medical procedures." Medical care services were found to be episodic and lacking in the preventive aspect; effective follow-up in curative care was also found to be lacking. The "team approach" by itself does not guarantee high quality or high efficiency of care. Evaluation indicates that medical education should better prepare physicians to deal quickly and effectively with common conditions.

1345 **Zukin, P., Gurfield, R.M., Klein, B.W.** *Evaluating a primary care clinic in a local health department.* Health Services Reports (Washington, D.C.), 88(1), Jan 1973, 65-76. Engl.

To alleviate the shortage of primary health care in a district of Los Angeles, USA, a special family care clinic was established. This document is a report of an evaluation by a multidisciplinary team of the role of the clinic, its adequacy in handling the community's health problems, and its ability to combine both curative and preventive services. The study had four phases: delineation of values and goals, analysis of performance with respect to goals, delineation of problems, and cost analysis. Resulting data such as demographic characteristics of patients, referral sources, and diagnostic/ therapeutic services undertaken have been tabulated. One finding was that only half the patients fell within the clinic's target population of low income families lacking access to other sources of medical care, but there was a reluctance to introduce any screening based on income. The family care clinic and three other types of family clinics in Los Angeles are compared with respect to health problems encountered, staff, resources available, and activities undertaken.

V.3 Planning

1346 **Badgley, R.F., ed(s).** *Social science and health planning: culture, disease, and health services in Colombia.* Milbank Memorial Fund Quarterly (New York), 46(2), Apr 1968. 352p. Engl.

These papers, prepared commentaries, and open discussions from the Round Table on Social Science and Health Planning in Latin America, review the methods and findings of the National Health Survey in Colombia and focus on the following three points: the National Health Survey as a research technique incorporating concepts and methods of social science, epidemiology, and statistics; the relationship of man and circumstances to his health status and to the organization and delivery of health services; and the relevance of social research findings for the planning of health programmes. The book is organized thematically, under the following chapter titles: Social survey and health research; The Colombian National Health Survey – planning, methods, and operation; Illness and health services; The economics of health services; and Planning for social change.

1347 **Banerjee, A.K.** *Cost benefit analysis of health measures at local level: a plea for a pilot project.* Indian Journal of Public Health (Calcutta), 16(3), Jul 1972, 141-145. Engl.

Cost-benefit analysis seeks to establish which of several alternatives will maximize social welfare at a given cost or which will achieve stated objectives at minimum cost. When applied to the public health aims of a country such as India, however, this technique is hampered by the absence of accurate health statistics and the interdependence of health aims with those in fields such as education. The author, therefore, proposes a 3-year

pilot study as a method of evaluation based on tangible indices of the standard of living rather than just the standard of health. He briefly describes the conduct of the study (to be located at a rural health centre), including its different phases – pretesting the questionnaire, data collection and analysis, introduction of medical services, and evaluation of subsequent changes in the components of the population's standard of living.

1348 Christian Medical Commission, World Council of Churches, Geneva. *Evaluation of health care systems.* In Christian Medical Commission, Annual Meeting 1971, Geneva, Christian Medical Commission, 1971, 65-67 Engl.

See entry 839 for complete proceedings.

Various proposals have been made for evaluating health care systems. The problem is how far limited resources can be used to provide optimum health care for the maximum number of people, in terms of Christian principles. Suggestions are (1) that the Christian Medical Commission should consider the problem of developing methods of evaluation, grading these from simple, inexpensive methods to more sophisticated ones requiring additional expertise; and (2) that the criteria necessary for moving from existing systems to experiments in new ones be listed. Other factors considered are long-range objectives of the plan and the problem of dependency, i.e., how far the success of such experiments depends upon the originator. The success of any innovation depends on effective leadership, clear recognition of the problem by the nationals, and their cooperation in solving the problem. Cases of successful evaluation experiments in Thailand, Liberia, and Indonesia are cited.

1349 Miyasaka, T. *Evaluation of a ten-year demonstration project in community health in a rural area in Japan; Chiyoda-Mura health project.* Social Science and Medicine (Oxford), 5(5), Oct 1971, 425-440. Engl.

A 10-year community health demonstration project carried out in an agricultural village in Japan from 1957 to 1966 is evaluated. The objectives of the project were to maintain and promote health of the people in the area, to encourage self-help activity and cooperation in community life, and to promote the improvement of various aspects of community life. Evaluation surveys were conducted four times in 10 years; changes were incorporated following each evaluation. An area where public health activities were not increased was used as a control group. Health programmes carried out each year during the project are tabulated. Improvements following 10 years of project implementation include reduced incidence of, and death from, acute communicable diseases and tuberculosis, reduced prevalence of cases of intestinal parasites, improved health among pregnant women, improved drinking water and sanitary facilities, and a decrease in flies. Infant mortality, however, showed no improvement; the problem of waste disposal remained unsolved; and the decrease in the crude death rate of the area was not deemed significantly different from that in the control area. Improvements in the realm of health education were more remarkable, as evinced by an increase in the peoples' knowledge of health problems and health activities, their understanding of the importance of early disease detection, their attitude toward the project, and their general health behaviour.

1350 Moffat, W.M., Nganwa-Bagumah, A. *Do we mean what they say? (An enquiry into the understanding of the terminology of disease in a rural area of Uganda).* Environmental Child Health (London), 17, Jun 1971, 47-49. Engl.

In Uganda, health and medical training are conducted in English, and medical terms must be translated into the local language for health education. The translated term is not always correctly understood by the target person. In this study, 166 mothers, who were bringing their babies to young child clinics in the Ankole district, were asked to describe symptoms for several common diseases for which there were "equivalent" English and vernacular terms. Their answers were compared with those from 26 health workers who ranged from medical assistants to nurse's aides. Although the health workers agreed on descriptions for five of the major terms, the rural mothers described the correct symptoms for only two. The authors discuss some implications of such misunderstandings and possible ways to prevent them.

1351 O'Keeffe, M. *Evaluation of medical missions: a pilot project.* Zambia, Churches Medical Association of Zambia, n.d. 6p. Engl.

This pilot study was designed to determine the feasibility of using analysis of community health needs rather than hospital statistics to evaluate the effectiveness of Zambian medical missions. The study centred on the population served by a new 70-bed hospital staffed by a sister-doctor and three nursing sisters, who also conducted a weekly general clinic 28 km away. Survey of 1 000 consecutive patients indicated that 90% came from within 32 km and that 54% had mild complaints that did not require medical attention. Four hundred and thirty-two villagers (i.e., about 10% of the catchment area population) were subsequently interviewed and examined to determine the disease prevalence of the community; particular attention was paid to preventable disease and the effectiveness of the hospital service in dealing with it. The survey results presented in the report suggest that utilization of medical care may depend less on the actual need for it than on the accessibility of medicines for symptomatic relief. Hospitals may meet the health needs of individuals but those of the whole community, which depends on its polluted water supply, inefficient agriculture, tribal customs, etc., go unmet. The health message must begin within the heart of the community itself, with some assistance from professionals, so that the people can gradually assume responsibility for their own health care.

1352 Oberg, K., Rios, J.A. *Community improvement project in Brazil.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 349-376. Engl.

Although the Chonin combined services programme for community improvement (Brazil) was well planned from an administrative standpoint, the importance of established community social organization and its relationship to the project was not sufficiently taken into consideration. By trying to bypass the local political organization through a nonpolitical community council, the project clashed with the values, personalities, and the traditional structure of the community. Planners neglected to give sufficient emphasis early enough to the actual dynamics of community interaction. Difficulties involving the community council and its coordinator, and the local political community were not perceived by those who could have impelled effective reappraisal and reorganization. This failure contributed to the breakdown of the planning process. The experience of the health service in other parts of Brazil (e.g., Pedro Leopoldo, where participation has been achieved by working with the existing local organization and its leadership) has demonstrated alternative solutions to the problem of gaining local participation.

1353 Woolley, P.O., Hays, W.S., Larson, D.L. USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: III. Perspectives and methodology.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)72-33, Jun 1972. 62p. Engl. 23 refs.

This is the third volume in a series of studies sponsored by the U.S. Agency for International Development aimed at identifying crucial problems in international health and potential roles for developmental assistance. Research methods are applied to develop a methodology to answer the following questions: (1) How can resources in the health sector be best applied to deal with basic problems? (2) Can resources from other sectors influence the progression or resolution of these problems? (3) Can policy discussions be identified that will benefit both the economic and the health sector? (4) To what extent will health influence the outcome of proposed economic development projects? and (5) To what extent will proposed economic development projects alter the health status of a population? A framework for discussion of these problems is developed, based on interdisciplinary observations made from case studies of health in developing countries.

1354 Woolley, P.O., Perry, C.A., Eccles, R.N. USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: I. Panama.* Washington, D.C., U.S. Government Printing Office, DHEW Publication No.(OS)72-31, Apr 1972. 205p. Engl. 100 refs.

The first volume in a series of studies sponsored by the U.S. Agency for International Development examines health and the health sector in Panama in terms of their contribution and relevance to economic and social development in that country. Living conditions, population trends, national health status, cost of disease, nutrition, and the country's health resources are examined. From the data obtained it would seem that Panama's health problems are related to three factors: maldistribution and inappropriate utilization of basic health services; poor nutrition due to misuse of food resources; and inadequate environmental sanitation. Health services are available to urban populations, but much less so to rural ones. A vigorous outreach service is needed to promote their effective and efficient utilization. The problems of food distribution and use are manifest in malnutrition among school-age children and affect one person in six in the country as a whole. Since these problems are all interrelated, they must be attacked simultaneously. Health education and demographic modification are deemed necessary to the solution of these problems.

1355 Woolley, P.O., Perry, C.A., Hays, W.S., Larson, D.L. USA, Department of Health, Education, and Welfare. *Syncrisis: the dynamics of health: II. Honduras.* Washington, D.C, U.S. Government Printing Office, DHEW Publication No.(OS)72-32, May 1972. 73p. Engl. 25 refs.

The second volume in a series of studies sponsored by the U.S. Agency for International Development examines the relationship between health and social and economic development in Honduras. Comprehensive integration of existing resources would help Honduras to break out of its cycle of disease-poverty-disease. Major diseases in the country are preventable. What appears to be a chronic state of ill health is actually an unreasonable demand on an inadequate public health sector aggravated by inadequacies in other public sectors. For example, the population suffers from malnutrition because high protein foods are exported. Reform would include making better use of existing facilities and changing the relationship between the health sector and other sectors.

V.4 Geographic distribution of health services

1356 Chasteland, J.C. *Etude sur la fecondite et quelques caracteristiques demographiques des femmes mariees dans quatre zones rurales d'Iran. (Study of the fertility and demographic characteristics of married women in four rural areas of Iran).* Teheran, Teheran University, Institute of Social Research, 1968. 316p. Fren.

The preparation, methodology, and results of a fertility study conducted in four rural areas of Iran are set forth. The study was undertaken to shed some light on the demographic behaviour responsible for one of the highest birth rates in the world (50.3 per 1 000). The

extent to which this behaviour is related to Islamic attitudes toward sexuality, marriage, procreation, contraception, and the status of women is probed. Data collected, tabulated, and analyzed concern the following topics: socioeconomic characteristics of the villages examined, retrospective fertility, present fertility, infant mortality, marriage patterns, and knowledge and opinions concerning population. The questionnaires used in the interviews are appended.

1357 **van Etten, G.** *Towards research on health development in Tanzania.* Social Science and Medicine (Oxford), 6, 1972, 335-352. Engl.

Based on the premise that effective rural health care is dependent upon qualitative and not quantitative change, the role of sociomedical research in promulgating change is discussed. Studies conducted on the workings of Tanzania's countrywide health centres revealed that these institutions were not fulfilling their preventive and educational roles in the community and were not reaching the intended number of people. A lack of understanding of the health centre concept on the part of the medical staff was found to be primarily responsible for this fact; a reorientation of rural staff learning was obviously needed. Such evaluative studies are to be encouraged, as a means of discovering ways of modifying medical care and training to meet local needs. Other developments to come out of this type of study were implemented in the Second Five-Year Plan (1969-74). They include intensified training programmes for doctors and medical assistants, a new cadre of village medical helpers trained to man village medical services, and a system of mobile teams to carry out public health schemes and treat minor illnesses.

V.5 Financial aspects

See also: 1025, 1347

1358 **Heller, P.S.** *Analysis of the structure, equity, and effectiveness of public sector health systems in developing countries: the case of Tunisia 1960-1972.* Ann Arbor, Mich., University of Michigan, Centre for Research on Economic Development, Discussion Paper No. 43, Feb 1975. 105p. Engl. 37 refs.

This paper presents an economic analysis of the health and medical sector in Tunisia. After reviewing the structure of investment and recurrent expenditure policy over the first planning decade, it analyzes the effectiveness with which resources are allocated in the health system. It provides a theoretical framework for the analysis of medical referral systems as well as an analysis of (1) the pattern of demand for medical services; (2) the operating characteristics of Tunisia's medical referral system; (3) the causes of capacity underutilization in hospitals; and (4) the incidence of government medical expenditure. Finally, the paper evaluates Tunisia's medical manpower strategy. (Author abstract.)

1359 **Jolly, R., Kamunvi, F., King, M., Sebuliba, P.** *Economy of a district hospital.* In King, M., ed., Medical Care in Developing Countries, Nairobi, Oxford University Press, 1966, Chap.12. 9p. Engl.

See also entry 785.

Data on capital expenditure, running costs, staff time spent on different activities, salaries, etc., have been collected from a simple 83-bed hospital in Mityana (Uganda) in order to provide information on the pattern of distribution of medical expenses and services in the community. The buildings accounted for an overwhelming part of the capital expenditure (83%), and a small fractional saving here would have been an appreciable economy; comparatively little was spent on drugs and equipment. Furthermore, the equivalent of about half the hospital's entire annual budget was being spent by patients for transportation; 40% of inpatients could have been treated satisfactorily in "self-care" facilities had these been available. Major surgery appeared to take a disproportionate part of the doctor's time, and no health education or formal staff teaching was done. Additional resources would therefore best be spent on health education, a separate under-fives' clinic, blood transfusion facilities, a "self-care village," and above all, mobile clinics.

1360 **Nugroho, G.** *Dana Sehat: an experiment in raising community health standards in Solo (Central Java): community health insurance scheme.* Solo, Indonesia, Panti Walujo Hospital, 1972. 20p. Engl. 12 refs.

A simple, practical, and inexpensive method of raising health standards in medically deprived communities has been introduced into a low-income area in Indonesia. This experiment, "dana sehat" or community health insurance scheme, was poorly received initially but proved much more acceptable when it was presented within the wider context of community development and was preceded by intensive dissemination of information. This paper describes in some detail the planning, implementation, and evaluation of the scheme and includes data on the population served, utilization of services, attitudes toward the scheme, and financial analysis. There is also a copy of the questionnaire that was used at the outset of the study to collect baseline data on family size, education, income, expenditure on food, etc.

V.6 Cultural aspects

See also: 1330, 1350, 1378

1361 **Bennett, F.J.** *Evaluation in health education.* Journal of Tropical Medicine and Hygiene

(London), 66, Jan 1963, 25-26. Engl.
Evaluation at every phase is necessary to the success of a health education programme. Different methods of evaluation and various considerations to bear in mind while evaluation is being carried out are discussed. One such consideration is the different sets of values against which the programme may be judged, i.e., those of the programme "producer" and those of its "consumers." Generally, however, the programme is evaluated according to the extent its stated goals are reached. A health education programme promoting certain basic principles of hygiene (washing, sunshine, feeding, and immunization) in Ethiopia serves as an example. Evaluation of programme impact on washing, for instance, could be assessed by measuring changes in: the use and number of washing and sanitary facilities; beliefs and attitudes concerning the value of washing (by means of a questionnaire); soap sales; disease patterns; etc.

1362 Carstairs, G.M. *Medicine and faith in rural Rajasthan.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 107-134. Engl.
Attempts by a Western-trained doctor to treat villagers in rural Rajasthan in northern India met with some obstacles due to traditional local beliefs. Misunderstandings on both sides arose from false expectations based on different theories of aetiology, different techniques of cure, and different conceptions of the role of the physician. Village people are not likely to change their whole world view to conform with that of the Western-trained doctor. Introducing Western techniques in public health and medicine necessitates adapting the roles of the doctor and other health personnel to fit existing cultural expectations. In this process, the concepts of infection, sterilization, and chemotherapy may be demonstrated, and the traditional unscientific reaction of villagers to even simple treatments should be accepted. Public health workers will have to formulate their measures so that they can be linked with old teachings and, above all, aim to enlist the aid of local community leaders.

1363 Cassel, J. *Comprehensive health program among South African Zulus.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 15-41. Engl.
The Palela Health Centre serves a Zulu community in South Africa. Examples from the centre's work illustrate the different degrees of resistance encountered in trying to improve the health status of the people. Changes were progressively more difficult to effect in these four areas: dietary improvement (through vegetable cultivation); increased milk and egg consumption; tuberculosis control; and soil conservation. An understanding of local ways and the importance of fitting new ideas into the existing cultural framework were essential in achieving lasting results. The centre's experiences demonstrated the advantages of an integrated service wherein the promotive-preventive and routine aspects of health practice are combined and made the responsibility of the same team.

1364 Chen, P.C. *Analysis of customs related to childbirth in rural Malay culture.* Tropical and Geographical Medicine (Haarlem), 25, Jun 1973, 197-204. Engl.
The successful health worker is one who understands the beliefs, attitudes, and practices of the people with whom he is dealing. Based on this tenet, customs related to childbirth in Malaysia are analyzed and categorized into four groups – beneficial, harmless, harmful, and uncertain. Ill health in Malaysia is viewed as a result of interaction between predisposing conditions (mental stress, incorrect behaviour) and supernatural causes (God, witchcraft, spirits) or physical causes (certain foods, heat, cold, wind, trauma). This philosophy underlies customs surrounding childbirth, which is itself viewed as a vulnerable condition.

1365 Conco, W.Z. *African Bantu traditional practice of medicine: some preliminary observations.* Social Science and Medicine (Oxford), 6(3), Jun 1972, 283-323. Engl. 117 refs.
In the context of the medicine of the South African Bantu, diseases, their names, and their causes are examined. Traditional African medicine recognizes two causes of disease: natural (old age, some congenital abnormalities, ingestion of poison, exposure to heat or cold, etc.) and supernatural (anthropomorphic – caused by a spirit through the agency of a wizard at the instigation of an enemy). Natural diseases are treated with practical techniques and empirical knowledge, but those of supernatural origin require that the agency responsible for the disease be discovered, and a specific antidote (which may include both natural and ritualistic elements) be undertaken. Although naturally caused diseases may be treated by anyone with the proper skills, supernaturally caused diseases require the attention of the witch doctor or a traditional doctor. The witch doctor possesses a special ability to "divine" the individual and the means responsible for a disease; the traditional doctor combines the elements of magic and philosophy with a wide empirical knowledge of medicines and an astute insight into the psychological makeup of the community. These beliefs that underlie African medicine are examined in detail, and the importance of understanding this network of concepts and beliefs in relation to modern medical schemes and programmes is emphasized.

1366 Lewis, O. *Medicine and politics in a Mexican village.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 403-434. Engl.
When a foreign research team visited the Mexican village of Tepoztlan to study its culture and its people, the residents asked the team to help them in a practical

way, i.e., by providing a doctor. The Mexican government supplied a doctor for a 6-month term, and the team helped the community establish a medical cooperative that would hopefully continue after the team left the village. Despite the fact that the cooperative seemed to meet an expressed need and despite its initial success, as judged by attendance, the clinic quite suddenly lost patronage and was abandoned. The research conducted by the team, although small in scale, highlights a number of principles and problems that accompany attempts to introduce modern medicine into backward communities. It indicates that the success or failure of a medical programme depends on many cultural factors besides the competence of doctors and the quality of service. The major obstacles encountered in the Tepoztlan case were these: a tendency to distrust innovations and generalized lack of interest in changing local ways of doing things; inadequacy of economic resources (even the 1 peso fee was too high for many villagers); lack of rapport between doctor and patients, due to the doctor's ignorance of native illness concepts and his attitude of superiority; continued faith of the villagers in their local curanderos; and perhaps most important, local interest groups headed by the leading curandero tended to view the medical cooperative as a threat to their power.

1367 **Marriott, M.** *Western medicine in a village of northern India.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 239-268. Engl.

This is a study of the social and cultural problems involved in introducing more effective medical techniques to the conservative Indian village of Kishan Garhi. It describes the social organization of the village, analyzes the village medical institutions, and reexamines the role of the Western doctor as it appears to the villagers in the context of their own social organization and medical institutions. The analysis reveals contrasts and conflicts that formerly existed between the roles assumed by indigenous and Western medical practitioners, conflicts that were obstacles to the spread of Western medicine. The analysis also points out resemblances between the roles of indigenous and Western medical practitioners and suggests how some of these resemblances might be exploited in establishing scientific bridgeheads. It is suggested that the successful establishment of effective medicine would largely depend on the extent to which scientific medical practice could divest itself of Western cultural accretions and adapt itself to the social life of the Indian village.

1368 **Mitchell, R.C.** Christian Medical Commission, World Council of Churches, Geneva. *Witchcraft, sin, divine power, and healing: the Aladura churches and the attainment of life's destiny among the Yoruba.* Geneva, Christian Medical Commission, 1968. 20p. Engl.
Seminar on the Traditional Background to Medical Practice in Nigeria, Ibadan, Apr 1966.

This paper, presented at the Seminar on the Traditional Background to Medical Practice in Nigeria, which was held at the University of Ibadan in 1966, discusses the rise of the Aladura Church among the Yoruba people. The rise of independent churches and new religious movements more related to the native situation and under indigenous leadership is viewed as an expression of a universal trend in developing countries. The Aladura religion, like traditional Yoruba belief, is strongly earth-oriented. Thus, it is not surprising that the claim to divine healing powers enhances its appeal to the Yoruba. Aladura healers have in the past been a liability to modern medicine, condemning it as a sign of lack of faith in God. However, modern research has revealed that they are moving toward at least an unofficial accommodation of modern medical practices. The movement is examined in order to expose the setting of future social and medical change and the possible role of the churches in promulgating it.

1369 **Navajo Tribal Council, Arizona, USA.** *Navajo-Cornell field health pilot project (CH 00007), 1957-1962: final report.* Windrock, Az., Navajo Tribal Council, 1962. 65p. Engl. 47 refs. Unpublished document.

The Navajo-Cornell Field Health Research project was organized jointly by the Navajo Indian Tribe, Cornell University Medical College, and the United States Public Health Service. The purposes of the project were: (1) to develop delivery of modern medical services to the Navajo people; (2) to extend this know-how to other socioeconomic groups; (3) to study specific diseases of cultural importance to the Navajo; and (4) to see what relevance the project could have to contemporary American medical problems. The products of this research project include: the organization, in the mid-1950s, of a system for health care delivery involving community participation and effective community control; a realization that carefully trained allied health personnel, rather than "language interpreters," were needed, and the consequent development of more extensive training and more successful use of native auxiliaries; and the development of a training manual in which Western medical technology is explained in terms relevant to the culture group unfamiliar with it. The relevance of such a project, in which a nontechnologic society is confronted with biomedical science and technology, to contemporary medical problems in the USA is discussed.

1370 **Prince, J.S.** *A public philosophy in public health.* American Journal of Public Health (New York), 48(7), Jul 1958, 903-912. Engl. 22 refs.

The crucial importance of community attitudes as determinants of the success or failure of a public health programme is pointed out, and a study underlining the need for health officers to apply social science techniques to the solution of public health problems is described. The study compares the results of a questionnaire administered to a representative sample of community residents and to a group of "opinion leaders" in the same community. The purpose of the study

was threefold: to delineate the ecologic and social structure of a community, showing the significance of this type of information for the health planner; to clarify the role opinion leaders may play in forming community attitudes toward public health; and to demonstrate the feasibility of establishing qualitative and quantitative baselines for objective measurement of the effect of health education programmes on knowledge of and attitudes toward public health. The methodology, results, and conclusions of the study are discussed in detail, and sample pages of the interview schedule are included.

1371 **Sherman, H.** *"Wonder" healers of the Philippines: is "psychic surgery" true?* Santa Monica, Ca., DeVross and Co., 1967. 339p. Engl.

This book, authored by the president and executive director of the Extra-Sensory Perception Research Associates Foundation, Little Rock, Arkansas, presents numerous cases of psychic surgery performed by spiritual healers in the Philippines. The account includes interviews with eyewitnesses, both skeptics and believers (including a first-hand account from the author himself), with those who have been healed, and with the healers themselves; a photographic sequence shows a healer removing a tumour from a woman's abdomen with his bare hands. In such operations, conducted with neither anaesthesia nor sterile technique, the patient characteristically feels no pain, and the incision closes without leaving a scar. Setting aside one's personal interpretation of the phenomenon, the fact remains that many Filipinos are availing themselves of this service that, while seemingly violating the laws of nature and hence the scientific world view, is giving satisfaction to many.

1372 **Swaminathan, M.C., Krishnamurthi, D., Iyengar, L., Rao, D.H.** *Health survey of the Onge tribe of Little Andamans.* Indian Journal of Medical Research (New Delhi), 59, 7 Jul 1971, 1136-1147. Engl.

A survey was conducted to determine the reasons for population decline of the Onge, a tribe of nomadic food-gatherers found on the island of Little Andaman (India). Sixty tribe members underwent laboratory investigation to determine haemoglobin values, glucose levels, serum cholesterol values, differential cell count, blood grouping and RH factor. A venereal disease research laboratories test for syphilis was run, cultures for parasites were taken, and finger and palmar dermatoglyphics were studied. The diet and living conditions of the group are described. No major nutritional or health problems specific to the population were uncovered to account for this decline. However, a high incidence of infant mortality (40%) and a similarly high incidence of infertility among women could account for it. Also, child mortality has increased due to infectious diseases contracted from outsiders. As this contact can be expected to increase in the future, it is recommended that in addition to medical, obstetric, and preventive care, at least one maternal and child health centre be provided.

1373 **van Amelsvoort, V., van Etten, G.** *Health practices in a rural community of Sukumaland: utilisation and attitudes relevant to the use of health services in the catchment area of Kahangala Teaching Health Centre, Kwimba district.* Mwanza, Tanzania, Ministry of Health, 1973. 28p. Engl.

This study was undertaken as a complement to two earlier studies done between 1969 and 1971 in various medical units in the Mwanza region of Tanzania. The first two studies aimed at establishing patterns of utilization of health facilities (i.e., dispensary, health centre, hospital) by the villagers of Kinango; the third aimed at recording the health behaviour of the people on the whole. Thus, people's reliance on local healers and self-medication could be established as well. It was hoped that an understanding of the people's health problems and the barriers between modern medical facilities and a rural population would aid in designing appropriate training for rural health workers. Diseases were documented according to frequency of appearance, seriousness, and cause (as perceived by the people themselves) and were treated according to the perceived cause. The dispensary was the most frequently used health unit, the health centre being only a second recourse. Antenatal and child health clinics attracted few villagers. Thus few children were vaccinated in spite of the morbidity and fear that measles, whooping cough, and polio inspired. The survey resulted in the following recommendations: compilation of more accurate community diagnosis of Kinango by student medical assistants; systematic vaccination; better integration of T.B. activities in health centre work; health education, given by student medical assistants to fill the definite gaps in the people's knowledge; evironmental improvement; and regular extramural work on the part of the health centre to improve its status with the people.

1374 **Wellin, E.** *Directed culture change and health programs in Latin America.* Milbank Memorial Fund Quarterly (New York), 44, Apr 1966, 111-128. Engl.

The author defines directed culture change as an attempt by an agency that possesses the necessary power and/or authority to modify or interfere with a culture in a deliberate and purposive way; it plays an important role in the organized promotion of public health. Attempts to modify existing patterns of behaviour in a rural area of Peru reveal some unexpected factors in the acceptance or rejection of change and some findings of practical significance to public health in Latin America. The first attempt, an effort to improve reporting of birth statistics through the development of village auxiliary registers (instead of department of health officials) was implemented with success in one village. Character sketches of two registrars, one successful in raising the number of births registered and the other not, are given; it was found that success depended more on the extent of the registrar's involvement in the community than on his organizational ability or a position perceived from the outside as being "influential."

The second attempt involved the installation of a pump in a village previously lacking a pure water supply. This project was doomed to failure because its implementers did not take into consideration the people's conception of its purpose. The pump was viewed by the villagers as a convenience measure, not a sanitary one. Their deep-seated respect and awe of water as a life-giving force would not permit them to accept that it might be the purveyor of malign disease-causing forces. Therefore, when the well became the occasion of much village dissension (maintenance, responsibility, access, etc.), it was concluded to be more trouble than it was worth, and abandoned.

1375 **Wong, H.B.** *Child health in Singapore: traditional practices and their effects.* Clinical Pediatrics (Philadelphia), 8(10), Oct 1969, 611-616. Engl. 10 refs.

Although the health trend in Singapore is rapidly approaching the Western pattern, some harmful traditional practices associated with maternal and child health persist. These are generally derived from the Chinese system and may involve the ingestion of drugs by the pregnant mother or the child, dietary restrictions during pregnancy, the application of a toxic substance to the umbilical cord of the newborn, the cauterization of the skin by burning, etc. It is important for the pediatrician to be aware of these practices so that he can recognize their symptoms, should they occur, and educate people in more healthful ones. Detailed descriptions of some of the most widespread practices and their resulting conditions are given.

1376 **Zigas, V., van Delden, J.** *New Guinea: studies relating the medical and behavioural sciences. Part I: urbanization, culture, and disease.* Social Science and Medicine (Oxford), 6(6), Dec 1972, 681-687. Engl. 9 refs.

The author traces the history of the physical, cultural, and behavioural changes wrought in New Guinea by the process of urbanization, demonstrating the roots of new social and medical problems. Contact with Western civilization led to the introduction of money, which was instrumental in provoking massive demographic change; men flocked from the country to the city to find work, leaving the rural villages to the women, children, and old men. This unnatural situation, combined with a depreciation of the traditional outlet for aggression (intervillage warfare), has resulted in the growth of violence, alcoholism, and prostitution in the cities. Urban employment, in which one interacts with strangers instead of family and friends, has caused the worker to lose his identity and has led to widespread alienation. Contact with Western goods and civilization has produced the desire, but not the means, to achieve these amenities. Deep conflicts have resulted from the juxtaposition of two vastly different systems of value – the traditional and the Western. The author feels that all these changes will force medical services to cope with a different set of diseases, i.e., those falling into the realm of "mental disorders" – psychoses, neuroses, and psychosomatic diseases.

1377 **Zola, I.K.** *Concept of trouble and sources of medical assistance: to whom one can turn, with what, and why.* Social Science and Medicine (Oxford), 6(6), Dec 1972, 673-679. Engl. 50 refs.

People who seek unorthodox medical treatment – both in developing and developed countries – have long misled sociomedical investigators in their attempts to describe and analyze medical care; therefore, this study outlines a tentative methodology for studying what the lay individual considers to be "illness" and where he seeks "medical" treatment. Data gathered would probe the individual's perceptions and would include his definition of bodily discomfort, his symptoms, his "weakest, most vulnerable body part," etc. They should also include a sociohistorical study of how he developed a particular disease, when it was recognized, how it was treated, who was responsible for its treatment, etc. With this background, researchers can examine and compare unorthodox and orthodox sources of medical assistance and ultimately discover why individuals turn to unorthodox medical services for help.

V.7 Epidemiological, family planning, MCH, and nutritional studies

See also: 0850, 0892, 0900, 0981, 1024, 1025, 1213, 1234, 1327, 1336

1378 **Adams, R.N.** *Nutritional research program in Guatemala.* In Paul, B.J., ed., Health, Culture, and Community: Case Studies of Public Reactions to Health Programs, New York, Russell Sage Foundation, 1955, 435-458. Engl.

Many of the problems that arise during the course of a research programme using human subjects can be solved successfully if adequate knowledge of the culture of both the subject population and the project personnel is available and is supplied. Anthropological research disclosed that growing resistance to a programme of nutritional research in the Guatemalan highland village of Magdalena could be attributed to six sources: (1) the project had become too closely identified with only one of two opposing factions in the village and had thus alienated the other; (2) by a logical train of argument, but one based on erroneous premises, the project had become identified with the Communist movement and had become the target of intense anti-Communist feelings; (3) the villagers assumed that blood, once lost, could not be regenerated, and thus opposed the taking of blood samples as a practice that would promote illness; (4) local conceptions had induced the belief that the purpose of the nutritional programme was to fatten the children so that they could be sent away and eaten; (5) resentment by the villagers over the limited services of a small-scale medical clinic affiliated with the research project spread to the rest of the project; (6) friction between project personnel was sensed by the villagers, aggravating feelings

of dissatisfaction. Identification of each of these factors made it possible to devise effective means for dealing with them.

1379 Arnhold, R.G. *Arm circumference as a public health index of protein-calorie malnutrition of early childhood: the QUAC stick, a field measure used by the Quaker Service Team in Nigeria.* Journal of Tropical Pediatrics (London), 15(4), Dec 1969, 243-247. Engl.

A technique for assessing the prevalence of malnutrition was adopted by the Quaker Service Team during the large-scale relief actions in Nigeria in 1969. It involved measuring the arm circumference (judged to be a good criterion of malnutrition) and relating it to height. An instrument called a "QUAC stick," i.e., a height-measuring stick marked off in arm circumferences as estimated appropriate to height, was developed and put to use. Data were collected from 14 villages. Trained auxiliary health workers were able to do the entire survey, leaving medical personnel free to treat critical cases of malnutrition.

1380 Cuba, Ministry of Public Health. *Pediatria 1974. (Pediatrics 1974).* Havana, Ministry of Public Health, 1974. 64p. Span.

This compilation of 62 tables and charts illustrates the improving health status of children in Cuba over the period 1962-74. Comprehensive statistical information is presented on the population structure, perinatal mortality, mortality for different age-groups, principle causes of death in these age-groups, incidence of notifiable diseases, the number and type of consultations, vaccination activities, and the distribution and utilization of pediatric facilities.

1381 Datta, S.P., Srinivas, D.K., Kale, R.V., Rangaswamy, R. *Evaluation of maternal and infant care in a rural area.* Indian Journal of Medical Sciences (Bombay), 27(2), Feb 1973, 120-128. Engl.

This paper describes the changes in maternal and child health services in a rural area of India from their commencement in 1967 to 1970. There was an increased registration of pregnant mothers, high-risk mothers, and first trimester primiparas. The number of antenatal clinic visits increased for all pregnant and high-risk mothers. Home visits and the percentage of high-risk mothers who were visited during the pre- and postnatal periods increased slightly. Deliveries by indigenous dais decreased slightly, and the effective radius for deliveries by trained midwives was 1 1/2 miles. The indigenous dais delivered fewer infants of high-risk mothers where the trend was toward hospital deliveries. Maternal mortality declined from 6.8 to 2.8 per 1 000 live births. Home visits provided care for more infants, but there was no improvement in attendance at the well-baby clinic, where less than 25% of infants attended. There was slight improvement in the number of persons protected by smallpox vaccinations but there was reduction in the triple antigen coverage (i.e., diphtheria/pertussis/tetanus). Infant mortality declined from 119.9 to 97.6, and the neonatal death rate from 68.5 to 39.5 per 1 000 live births. There was no change in perinatal mortality. The infant deaths due to prematurity and asphyxia decreased during the period. (Modified author summary.)

1382 Ghosh, B.N., Datta, S.P., Lamba, K. *Study on family planning in a slum community in Pondicherry.* Indian Journal of Medical Research (New Delhi), 57(10), Oct 1969, 1982-1989. Engl.

The effectiveness of modern contraceptive methods is known to vary among different groups of people due to social, economic, or religious differences. This study of family planning in an Indian semiurban slum community was designed to provide information on the knowledge and practice of contraception, the acceptability of the intrauterine device, and the influence of the IUD on fertility. An active campaign to promote IUD insertion had been operating since 1966, and the case histories of 135 women fitted with the loop were examined. In the present study, the removal rate for personal reasons was high, possibly due to poor motivation, and the failure rate (i.e., pregnancy) was 1.5% after 30 months of observation. When unintended pregnancies, expulsions, and removals were considered together, 32.4% of women adopting the IUD found it to be unacceptable. The continuation rate after 30 months was 68.9%. Fertility rate observed in the community was one and a half times lower than that expected following IUD insertions alone; apparently coitus interruptus and abstinence are the main factors responsible for this discrepancy, and it is therefore suggested that these methods might be used successfully in a community that does not accept any mechanical, chemical, or hormonal contraceptive method.

1383 Ghosh, B.N. *MCH services and family planning in a semi-urban slum community in Pondicherry.* Indian Journal of Public Health (Calcutta), 12(2), Apr 1968, 91. Engl.
Summary only; see also entry 1244.

Of the total population of 5 091 in the southern Indian community of Pondicherry, 77% are Hindus and 22% are Christians. One hundred mothers and 10 barber-women (indigenous midwives) practicing in the area were interviewed, and 106 cases of loop (IUD) insertions were checked every 2 weeks. Monthly records of births have been maintained since 1965. To obtain information on the attitude and practice of family planning among the local population, 872 males and 937 females were interviewed. Results show that domiciliary delivery services of the maternity centres were only 20% utilized. The rest were conducted either in the general hospital or by the barber-women. This situation is prevailing, although 90% of the prenatal mothers are contacted by the health centre midwives and public health nurses. Mothers preferred the facilities for hospital deliveries to the existing home conditions. Other features determining the acceptance of services were conduct of delivery, care of the cord, and diet of the postnatal mothers. Men knew more than women about family planning; however, it is too early to draw any

conclusions about the effect of family planning activities on the local birth rate. (Modified journal abstract.)

1384 Gordon, J.E., Gideon, H., Wyon, J.B. *Midwifery practices in rural Punjab, India.* American Journal of Obstetrics and Gynecology (St. Louis), 93(5), 1 Nov 1965, 734-742. Engl. 9 refs.

A study of obstetrical practices in a remote rural area of the Punjab, India, was undertaken to identify specific features in the clinical course of parturition contributing to high neonatal mortality (80 per 1 000 deliveries) especially in the presence of untrained midwives. Details of birth according to attendant, clinical course, deaths of live-born infants, and still-births were recorded either at the time of birth or within the ensuing month by trained health workers under physician supervision; all deaths were investigated by a physician. Neonatal mortality was generally related to harmful obstetrical practices – such as the use of a dirty instrument to cut the umbilical cord, or the dressing of the cord with a contaminated substance – whereas death occurring after the first month of life was generally related to the living conditions. As a result of this study, it was concluded that village midwives should be better trained and supervised, a system of midwife registration should be set up, and expectant mothers should be immunized against tetanus to prevent the disease in the child. Study findings are statistically presented in seven tables.

1385 Guerrant, R.L., Cash, R.A. *Infectious disease: treatment of cholera and diarrheal illnesses.* In Chen, L.C., ed., Disaster in Bangladesh, New York, Oxford University Press, 1973, 81-94. Engl. 15 refs.

See also entry 1324.

It is conservatively estimated that in Bangladesh more than 250 000 people, mostly children, die each year from dehydration and other complications associated with diarrhea. Furthermore, illnesses impose an enormous "sickness" burden on society, and their impact is all the more devastating because of the simultaneous high prevalence of malnutrition. This chapter of *Disaster in Bangladesh* reviews the infectious signs and symptoms, therapeutic approaches, and the interrelationship with malnutrition (including some harmful traditional practices). Diarrhea is prevalent where sanitation and potable water are inadequate, but sanitation conditions will not be improved sufficiently in the immediate future to alleviate the problem. Present vaccines are inadequate, but fluid and electrolyte replacement can significantly reduce mortality and morbidity; a simple solution of glucose and electrolytes, ingested orally, is effective, inexpensive, and accessible to rural regions. Establishment of suitable treatment centres should be given urgent priority.

1386 Henderson, D.A. *La evaluacion en los programas de vacunacion. (The role of evaluation in vaccination programmes).* Boletin de la Oficina Sanitaria Panamericana (Washington, D.C.), 66, May 1969, 426-435. Span.

In vaccination programmes, planning and evaluation are inseparably linked and specific objectives must be clearly defined from the inception. The principal task of evaluation is to determine whether or not an immunization programme has succeeded in reducing the incidence of a disease – a process that requires the continuing surveillance of the status of the disease. This may be termed "primary evaluation" and should be followed by a "secondary evaluation" consisting of certain procedures designed to check results. Among secondary evaluation procedures, the following are the most critical: (1) vaccine efficacy, which should be verified beyond doubt before its application; (2) vaccine coverage, which relates to the principal objective of the programme and requires the establishment of a reliable checking system; and (3) surveillance system, which includes such important evaluation aspects as checks of the number of cases reported and of the promptness and frequency with which control measures are taken. Further evaluation procedures are cost-benefit analysis and the establishment of a reporting system of minimum information required for evaluation. It is pointed out, however, that in checking and comparing results there is no substitute for personal observation in the field. The author stresses the importance of disease surveillance as the primary component in the evaluation of vaccination programmes. (Revised journal abstract.)

1387 Islam, N., Giasuddin, M. *Pulmonary tuberculosis in Bangladesh: report from a T.B. clinic.* Indian Journal of Chest Diseases (New Delhi), 14, Oct 1972, 215-223. Engl.

To obtain information on the prevalence of tuberculosis (TB) in Bangladesh, a survey was conducted over a 3 1/2-year period at a free TB clinic in Dacca. A total of 16 271 persons were examined and the data analyzed for three population groups: voluntary or referred cases with symptoms, nonindustrial (students and office workers), and industrial (mill workers). The percentages of radiological suspects were respectively 23.2, 4.5, and 2.7, figures that coincided closely with those obtained in earlier studies. In all groups the numbers of suspects increased with age, the highest incidence being in the age group 51-60. The authors note the shortcomings of the present survey, e.g., physicians are reluctant to refer patients to the TB clinics, women avoid attending, and patients with minor symptoms will not report for examination. It is estimated that there are nearly 2 million TB patients in Bangladesh but fewer than 1 000 beds for them. The government cannot cope with the problem alone, and the authors stress the need for aid from voluntary associations to help distribute drugs, assist with health education, and arrange for domiciliary treatment, tuberculin testing, and BCG vaccination.

1388 Lee, S.K., Kim, D.H., Kim, H.K., Hong, S.H., Yeh, M.H., Jung, J.H., Shin, J.H., Park, J.S., Shin, T.K. *Status of maternal and child health in a rural area.* Taegu, Korea, Kyungpook National University, Department of Preventive Medicine and Public Health, Oct 1972. 65p. Engl., Korean.

A study on maternal and child health (MCH) in Korea was undertaken because weaknesses in MCH facilities were recognized and little statistical data existed. The study was carried out simultaneously with a project on maternity aide utilization in MCH and family planning; data were collected by maternity aides via interview and questionnaire over a 21-month period (April 1970-January 1972). Information concerned the basic characteristics of households and women, fertility, pregnancy wastage, immunization, nutrition of infants, diet of women during pre- and postnatal periods, last delivery and the circumstances, knowledge and attitudes regarding prenatal care, family planning, and practices at current delivery. Study findings on these topics are presented in tables and are followed by a brief discussion.

1389 **Marchione, T.J.** Caribbean Food and Nutrition Institute, Kingston, Jamaica. *An evaluation of the nutrition and family planning components of the community health aide programme in the parish of St. James, Jamaica: an interim report of work to date.* Kingston, Jamaica, Caribbean Food and Nutrition Institute, Sep 1973. 50p. Engl. 18 refs.

Community health aides in St. James, Jamaica, are members of the health team who work in the community, teaching health and nutrition, administering first aid, encouraging parents to have their children immunized, influencing people to attend family planning clinics, etc. Their impact on nutrition and family planning in the community is being evaluated, and this report outlines the plan of evaluation, gives details of the community health aide programme's objectives, examines the health aides' visiting activities and social relations in their respective communities as of April 1973, and presents the nutritional and family planning baseline against which the programme's effects can later be measured. It also takes a fresh look at "programme stimuli," i.e., influences that stimulate the community health aide to do a job well and enthusiastically, so that, in future, programmes and training can reinforce such stimuli. Questionnaires used to rate community health aide performance and to gather baseline data on household nutrition and family planning behaviour are appended.

1390 **Marshall, C.L., Brown, R.E., Goodrich, C.H.** *Improved nutrition vs. public health services as major determinants of world population growth.* Clinical Pediatrics (Philadelphia), 10(7), Jul 1971, 363-368. Engl. 48 refs.

Various research findings are cited to counteract the popular view that medical discoveries and improved public health measures are responsible for the population explosion in developing countries. Careful observation reveals that death decline has generally preceded and not followed the influence of such measures. Results of malaria-eradication programmes in Ceylon (Sri Lanka) and elsewhere are cited to prove their negligible effect on the country's death decline as a whole, and a tentative hypothesis relating the population explosion to improved nutrition is put forward. An experiment carried out in Guatemala – in which food supplements were found to be more effective than medical services in reducing child mortality – lends support to this hypothesis. The population of Ireland grew from 3 million to 8 million between 1754 and 1854 as a result of the introduction of a new food – the white potato. More recently, the introduction of enriched flour was followed by a prompt decline in childhood mortality in Canada and Scandinavia. Improved nutrition may be due not to increased food production but to better storage facilities, improved transportation, and superior farming techniques. Thus the world's technologists – and not just its health workers – must be held responsible for the "population crisis." Three tables containing world population data are included.

1391 **McCormack, W.M., Curlin, G.T.** *Infectious diseases: their spread and control.* In Chen, L.C., ed., Disaster in Bangladesh, New York, Oxford University Press, 1973, 67-80. Engl. 24 refs.
See also entry 1324.

Infectious diseases figure heavily in the overall morbidity and mortality of Bangladesh, and their control should be a priority of the health services. This chapter of the review *Disaster in Bangladesh* briefly discusses the aetiology, epidemiology, and treatment of infectious diseases and emphasizes particularly cholera, smallpox, tuberculosis, and preventable childhood illnesses (diphtheria, pertussis, tetanus, measles, and poliomyelitis). The authors note that villagers in Bangladesh are becoming more aware of the capabilities of modern medicine and are demanding that communicable diseases be controlled. Although underlying health problems, such as lack of sanitation and pure water, may be more important health considerations, they demand complex socioeconomic changes that may only be brought about after the communicable diseases have been controlled through curative measures.

1392 **Nycander, G.** Swedish International Development Authority, Stockholm. *Family planning in the field: standardized observations of field midwives' working behaviour and analysis of factors affecting the quality and outcome of the Ceylonese field programme, Colombo 1971.* Honolulu, East-West Center, n.d. 1v.(various pagings). Engl.

In 1965, Ceylon (Sri Lanka) made family planning a governmental responsibility, integrating it with the already-existing well-developed maternal and child health service. Doctors (medical officers of health (MOHs)), midwives, and other paramedical personnel were given special training to assume the role of family planning motivators. The present study was undertaken to evaluate the family planning programmes being administered by MOHs and implemented by the field midwives, and, thus, indirectly to evaluate their training and to prepare refresher courses for them. Survey methodology involved training a team of social workers to observe and evaluate the midwives' motivational and follow-up visits. The survey was implemented in two steps; during October-December 1969

the midwives' behaviour in the field was observed and information was collected from the MOHs; 15 months later the medical data were gathered on those clients who had responded positively to the midwife's motivational visit. Survey findings, especially those showing that genuinely motivated clients did not adopt, or discontinued, family planning are discussed.

1393 **Pakistan Population Planning Council, Lahore. Family Planning Association of Pakistan, Lahore.** *Pakistan: a profile.* Lahore, Family Planning Association of Pakistan, 1973. 28p. Engl.

After providing an outline of the people, culture, education, and economy of Pakistan, this review describes the country's commitment to population planning. The government-sponsored population planning programme was established in 1965 with a budget of 22.14 million rupees, and in 1973-74 the budget was 1 025.10 million rupees – an indication of the importance now accorded this programme. This publication notes the social and economic consequences of uncontrolled population growth and outlines the evolution of the organization and administration of the population planning programme (including staff training). Also discussed are the importance of comprehensive documentation and evaluation systems, incentive schemes for workers and clients, and uses that can be made of the mass media (especially radio). A final section of graphic data includes maps, tables, and charts on population distribution, population increase, and contraceptive activities.

1394 **Piotrow, P.T., ed(s).** *Population and family planning in the People's Republic of China.* Washington, D.C., The Victor-Bostrom Fund and the Population Crisis Committee, Spring 1971. 35p. Engl.

This booklet is a compilation of short articles, statistical data, and comments on the philosophy and practice of birth control in the People's Republic of China. Family planning activities commenced in 1956, and some progress was made in the cities. However, contraceptive methods were not accepted by the majority of the population who live in rural areas where illiteracy and suspicion of change first had to be overcome. In the early 1960s there was a breakthrough, partly because of a scheme encouraging urban medical and health workers to serve in the rural areas, but mainly due to efforts toward "social education." The family planning campaign was not based on the hardships of overpopulation (though data in this booklet indicate the vulnerability of China's agriculture), nor on publicity and voluntary compliance; instead it fostered social pressure to instill a positive sense of communal good, to discourage early marriage, and to bring about the emancipation of women. Family planning plays an integral part in medical care in rural areas, and all medical organizations, mobile units, "barefoot doctors," and army medical teams distribute information on contraception. Also discussed in the booklet are the availability of abortion and different contraceptives, the social consequences, the family planning education programme, and an outline of the rural health care system as a whole.

1395 **Purandare, B.N., Batliwalla, P.R., Modi, S.P.** *Our experience with oral contraceptives.* Journal of Family Welfare (Bombay), 16(1), Sep 1969, 3-9. Engl.

An Indian hospital research centre evaluated the effects of combination, sequential, and low-dose oral contraceptives on 4 365 patients and found all the methods to be acceptable, safe, and effective. Most of the patients were of low socioeconomic status, and about 30-40% were illiterate. Although some 50% discontinued use of the tablets, their reasons were mainly related to change of address, difficulty in visiting the centre, and desire for pregnancy; only 9% dropped out for reasons directly related to the pills (e.g., side effects, fear of side effects, inconvenience). The general advantages, contraindications, and complications of oral contraception are described together with the specific benefits and drawbacks of the different types of pill.

1396 **Rosenfield, A.G., Asavasena, W.** *Rural-oriented maternity services.* American Journal of Obstetrics and Gynecology (St. Louis), 115(7), 1 Apr 1973, 1013-1020. Engl.

The delivery of maternity and neonatal care in rural areas is extremely difficult for many reasons, the most critical being the serious shortage of doctors and other health personnel who are willing to work outside the cities. The problems are particularly serious in Asia, Africa, and Latin America. In Thailand, regional maternal and child health (MCH) centres have been developed as a first step in bringing about improvements in MCH care. Each of the three centres opened so far consists of a 50- to 80-bed maternity hospital and a school for auxiliary midwives. Although traditionally most rural women preferred to have their children delivered at home, these centres have been heavily utilized. The improved maternity care has, in turn, led to a uniquely successful postpartum family planning programme. Based on these successes, a plan is presented to expand these services to the more than 80% of rural women who do not now receive maternity care. This expansion, in turn, should result in reduced maternal and neonatal mortality and morbidity and in a significant increase in acceptance of family planning services. (Modified author abstract.)

1397 **Saxton, G.A.** *Community approach to fertility control: the Uganda experience.* In Gould, G.C., ed., Health and Disease in Africa: the Community Approach, Nairobi, East African Literature Bureau, 1971, 247-257. Engl.

This report, presented at the 17th annual conference of the East African Medical Research Council, reviews the experience of two family planning services in Uganda. The Lippes Loop D proved superior to other IUDs and to the birth control pill in terms of continued use; however, its high expulsion rate and poor reputation prompted a search for better methods. Medroxy-progesterone acetate was tested to determine its suitability.

Women who were unable to tolerate an IUD, or were unreliable "pill-takers," or were nursing mothers received medroxy-progesterone acetate, intramuscularly, in doses effective for 3-6 months. In the absence of serious side effects, this form of contraception was offered to the other women, and it soon became the most popular method. It is emphasized, however, that patients must be warned of possible side effects. Even the minor ones, such as amenorrhea for prolonged periods; irregular, sometimes frequent, vaginal bleeding; and slow return of fertility, could cause anxiety. Immunization clinics are recommended locations for family planning services because they require repeated attendance and child and mother can be treated simultaneously.

1398 **Srivastava, R.N., Bhushan, V., Prasad, B.G.** *Quantitative concept in the assessment of filariasis: observations in villages of the Rural Health Training Centre, Sarojini Nagar, Lucknow.* Indian Journal of Medical Research (New Delhi), 57(10), Oct 1969, 1975-1981. Engl. 8 refs.

Data from studies of filariasis carried out at the Rural Health Training Centre, Sarojini Nagar, Lucknow, India, in 1959 and in 1966 are examined retrospectively to determine whether the intensity of infestation in the area had increased, remained stationary, or decreased and to discover more about the dynamics of filarial transmission. A previous statistical analysis of the data found no significant increase in the numbers infected between 1959 and 1966. This study, however, utilizes a "quantitative concept" to analyze the data; instead of using conventional ideas (endemicity, average infestation, etc.) it considers the frequency distribution of microfilaria counts in the infected population. The methods are outlined and the data are tabulated. This technique revealed that intensity of infection increased significantly from 1959 to 1966. However, more extensive use of this quantitative concept in the assessment of filariasis is needed to establish its validity and reliability.

1399 **Srivastava, R.N., Prasad, B.G.** *Epidemiological study of filariasis in the villages of the Rural Health Training Centre, Sarojini Nagar, Lucknow.* Indian Journal of Medical Research (New Delhi), 57(3), Mar 1969, 528-542. Engl.

An epidemiologic study of filariasis was undertaken in 10 villages of the Rural Health Training Centre, Sarojini Nagar, Lucknow, India, over a 6-month period (April-October 1966). A screening of 265 families (1 346 individuals) was done for symptoms and/or microfilaria in the blood. The distribution of the infection, disease and endemicity rates, average infestation, and type of disease manifestation according to age, sex, religion, and social class are discussed. The fact that filariasis was found in 42.3% of the families illustrates the magnitude of the problem; however, a study of the preferential breeding ground of the filariasis vector, a mosquito, indicates environmental sanitation could alleviate the situation. Data collected are presented in seven tables.

1400 **Tewari, R.N., Jain, P.C., Prasad, B.G.** *Medico-social study of pulmonary tuberculosis in Mati village, Lucknow.* Indian Journal of Medical Research (New Delhi), 57(12), Dec 1969, 2283-2288. Engl.

In 1967, a modified medicosocial survey was conducted in Mati village located within the treatment range of the Rural Health Training Centre, Sarojini Nagar, India. A total 2 544 persons were screened for tuberculosis. Of these, 186 (7.31%) demonstrated symptoms, of whom 70 (37.6%) had abnormal X rays. Cultures from those 70 showed 21 with mycobacterium. The most frequent symptom was cough, followed by chest pain, dyspnea, fever, and haemoptysis. Patients had experienced symptoms for more than 1 month, and the proportion of patients with abnormal radiographs increased with age. More persons from the lower social classes (lower middle, poor, and very poor) suffered from the disease. The patients tended to go to the nearest facility for relief of symptoms; discontinuation of treatment was common due to ignorance and lack of proper supervision of patients. (Modified author summary.)

Community health committee, Colon Province, Panama

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